TouchTunes

PLAYDIUM

INSTALLATION AND SETUP GUIDE

Disclaimer

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TOUCHTUNES INSTALLATION AND SETUP GUIDE FOR TOUCHTUNES PLAYDIUM™ JUKEBOXES

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TouchTunes Interactive Networks, Inc.
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1 Welcome

About this Guide

This guide is intended for Operators of TouchTunes digital jukeboxes and their technicians, and TouchTunes technical support and field service personnel. It provides important information about the installation, setup, and operation of Playdium.

About this Guide

Introducing Playdium

Features Overview

- Display
- Sound & Amplification
- Light Show
- Hardware
- Simplified Maintenance
- Advanced Diagnostics
- Mounting Options
- Connectivity

Playdium Technical Specifications

- Dimensions and Weight
- Electrical Specifications

Disclaimer and Important Safety Instructions

Contacting TouchTunes

Introducing Playdium

Playdium is TouchTunes' next generation platform for in-venue entertainment, redefining the possibilities for new user experiences and revolutionizing the framework for service and support.

Features Overview

Display

Playdium features a 23 inch LED-backlit LCD monitor. Playdium's monitor features a 16x9 aspect ratio.

Sound & Amplification

Playdium's internal amplification is provided by ICEpower® 2-channel dual amplifiers with integrated power supply. The jukebox offers three independent output zones, two of which can be powered by internal amplification, while the third is externally-powered. The internal amplification features over-current and thermal shutdown protection.

Light Show

Playdium's multicolor LED light show features 16 million colors, cast through two-way mirrored panels. A blue LED brand bar (which features a red status indicator LED) and backlit payment means complete the lighting package.

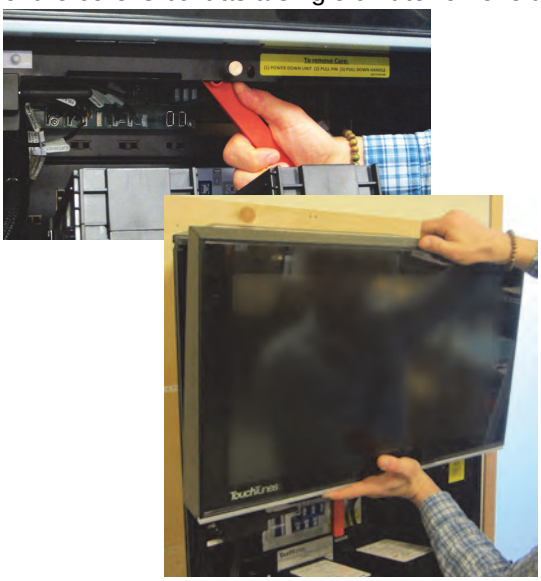
Hardware

Playdium's hardware specs include:

- Advanced 64-bit CPU
- 500 gigabyte SATA hard drive
- High definition camera with flashes
- Two bill acceptors

Simplified Maintenance

The cables and connectors normally required in a jukebox have been eliminated by efficiently combining all electronics into a single, quick-release core module. Assembled under highly controlled factory conditions, the entire core is built as a single unit to remove the most common sources of failure.



This new paradigm significantly increases reliability and results in a much lighter module weighing less than 30 pounds, making it easy to transport or replace.

Advanced Diagnostics

Playdium's improved diagnostic tools help you identify issues with the jukebox's network connection, audio connections and output, hard drive functionality, and much more. Playdium's diagnostic capabilities also make it easier for TouchTunes' support team to identify and correct issues remotely.

Playdium also provides enhanced system recovery capabilities and improved automated alerts that let you know about potential problems before they become critical.

Mounting Options

Playdium can be mounted on a wall, or installed on its own optional floor stand. No separate mounting bracket is required, as the Playdium chassis doubles as its own bracket.

Connectivity

Playdium is designed to use either a wired or a wireless broadband connection only. Supported connection options include DHCP and static IP. The wireless broadband connection option offered by TouchTunes supports 4G/LTE speeds (where available.)

Playdium Technical Specifications

Dimensions and Weight

	Metric	Imperial
Height	76.9 cm	30.3”
Width	60.3 cm	23.8”
Depth	24.1 cm	9.5”
Weight (core)	12.3 kg	27 lbs
Weight (enclosure)	16.4 kg	36 lbs
Weight (total)	28.7 kg	63 lbs

Electrical Specifications

Power: 120V AC at 60 Hz, and up to 5.0A.

Disclaimer and Important Safety Instructions

TouchTunes Interactive Networks is not responsible for any damage resulting from the improper installation or connection of test kit components or any other external equipment to your kit. Nor is TouchTunes responsible for any damage caused during shipment (except the shipment to the original purchaser) or any damage caused by:

- impacts, fluids, fire, flood, wind, earthquake, lightning or similar disaster
- unauthorized modifications, attachments or peripherals, improper use, environment, installation or electrical supply
- improper maintenance
- any other misuse, abuse, or mishandling

Familiarize yourself with this important safety information before proceeding with product installation.

The Lightning Flash with arrow head symbol within an equilateral triangle is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product enclosure that may be of sufficient magnitude to constitute a risk of shock to persons".

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product".

WARNING: Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THIS APPARATUS

DO NOT USE THIS APPARATUS NEAR WATER.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, THIS APPARATUS SHALL BE CONNECTED TO A MAINS SOCKET OUTLET WITH A PROTECTIVE EARTHING CONNECTION.

WARNING: The speaker output of this unit can exceed 10 Watts and could cause a shock injury. Connection to speakers should be performed by a skilled person in compliance with local building codes. Class 2 wiring is required for speaker cables. Use of external speakers outside the ratings stated at the speaker jack may result in a shock injury or damage to the unit, or equivalent.

CAUTION: Do not use the Playdium immediately after transferring the unit from a cold place to a warm place as condensation may have occurred on internal components. Wait for the unit to reach room temperature before using it.

IMPORTANT: See product enclosure for safety-related markings.

TO COMPLETELY DISCONNECT THIS APPARATUS FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE

THE MAINS PLUG OF THE POWER SUPPLY CORD OR APPLIANCE COUPLER SHALL REMAIN READILY ACCESSIBLE

No serviceable parts inside, please contact TouchTunes Customer Support for service.

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.

Clean only with dry cloth.

Do not block any ventilation openings. Install in accordance with the manufacturers instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Only use attachments/accessories specified by the manufacturer.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Contacting TouchTunes

If you need help with or have questions about this document, contact TouchTunes by:

- using the email links on the Contacts page on the TouchTunes Dashboard at https://operator.touchtunes.com.
- calling the TouchTunes 24/7 Service Hotline at 847-353-1954.

To help us assist you more effectively with problem reports, the following information can be required when contacting TouchTunes Support:

- Jukebox ID.
- The serial number of any component you believe to be defective.
- The date/time of the problem.
- Actions performed immediately before the problem occurred.
- Any additional comments.

If you need assistance with this or any other TouchTunes product, call technical support at 847-353-1954. We value your comments.

Installation

2

This chapter explains how to install Playdium.

Topics

Safety Instructions
List of Components
Preparing Tools for Installation
Installing the Chassis
Installing the Core
Next...

Safety Instructions

Before proceeding with installation, you must read the following safety instructions:

IMPORTANT: In order for the installation process to go smoothly and avoid possible damage to the jukebox, associated hardware, or the installation area, you should ensure that you bring all the components, equipment, and tools required to complete the installation to the area where the jukebox will be installed.

CAUTION: Playdium is heavy. While it is designed to make it possible to install by one person working alone, it is always a good idea to have a second person available to hold things in place and help you lift the heavier components.

List of Components

Before you begin the installation, check that you have received all of the hardware components and that the hardware components and items in the parts kit are in good condition.

CAUTION: Do not attempt installation if any hardware component or item in the parts kit is damaged. Contact your distributor or TouchTunes to report the damage immediately and request replacement parts.

Part #	Description	Quantity
700743-002 or 700745-001 (for Canada)	Playdium Jukebox	1
401267-001	Parts kit box, which contains:	1
• 300846-108	• AC Power Cord, 108”	1
	• Payment door keys	1 (set)
• 100000-001	• Euroblock connectors	2
• 600069-001	• Wireless (RF) Remote kit (includes bracket)	1
900853-001	Wall Mounting Template	1
	Documents package, which contains:	1
• 900490-001	• Cable flags (sticker labels)	1
• 900785-001	• Playdium Quick Start Guide	1
• 900786-001	• Playdium Connection Diagrams	1
• 900774-001	• This guide	1

Preparing Tools for Installation

You may require these tools to install Playdium. Ensure that you have all the tools at hand before beginning the installation:

- Phillips #2 screwdriver
- Phillips #3 screwdriver

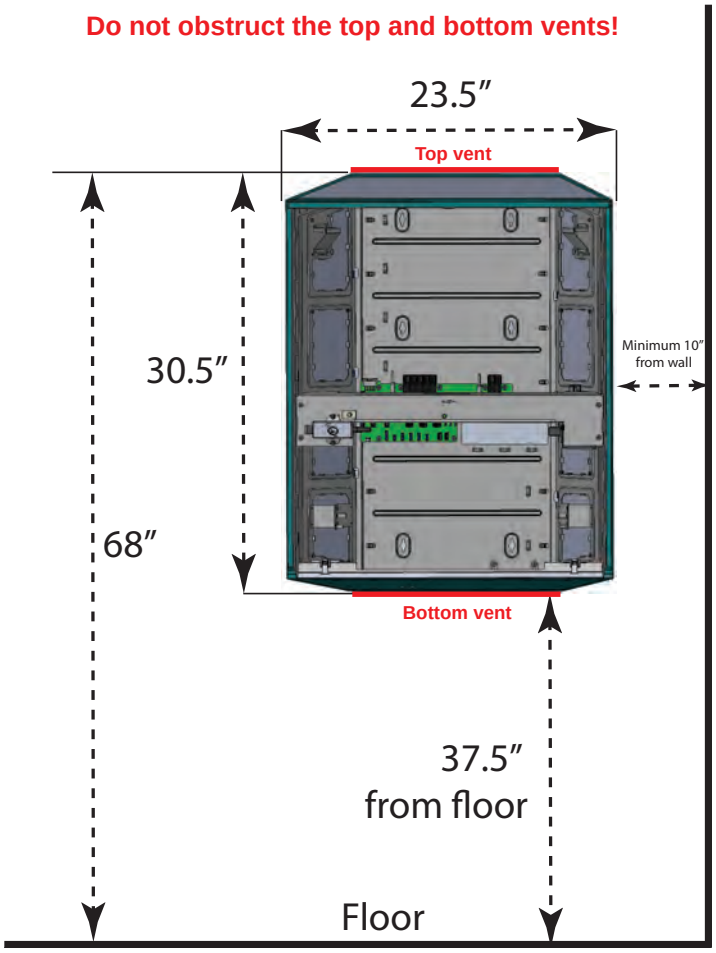
Installing the Chassis

Playdium does not require installing a separate mounting bracket. Playdium’s chassis also serves as its mounting bracket. As well as serving to support the jukebox, the chassis also contains electronics that serve as the intermediate between the Playdium core, and the payment means and other, external hardware. The chassis comes with the payment panel and payment means pre-installed.

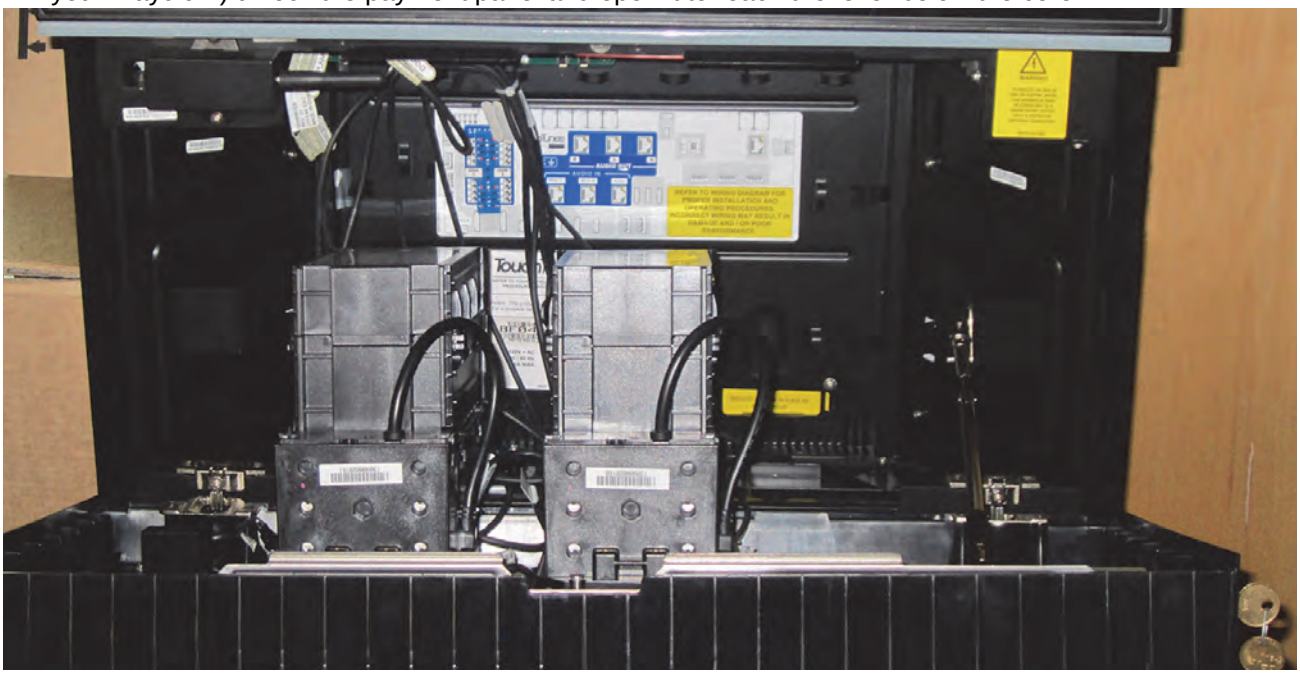
Important: When installing in a location where there is an intersecting wall to the right, ensure that you allow at least 10 inches of clearance between the wall and Playdium to allow easy access to the lock mechanism.

1. On the wall where Playdium is to be installed, measure 68 inches (5 8”) from the floor and mark this measurement. This will indicate where the top of the chassis needs to go.
2. Using the included template, mark the position for the chassis on the wall where you intend to install Playdium, ensuring that the template is leveled.
3. Mark where the screws will be inserted. The top two holes should be aligned with the top part of the mounting slot in the chassis, so the chassis will “hang” from those two screws, while the bottom two holes should be aligned with the bottom of the mounting slots, to make it harder to pull Playdium up and off its screws without first removing the bottom screws.
4. Partially install the top two screws on the markings you just made. You will soon be hanging Playdium on those two screws.

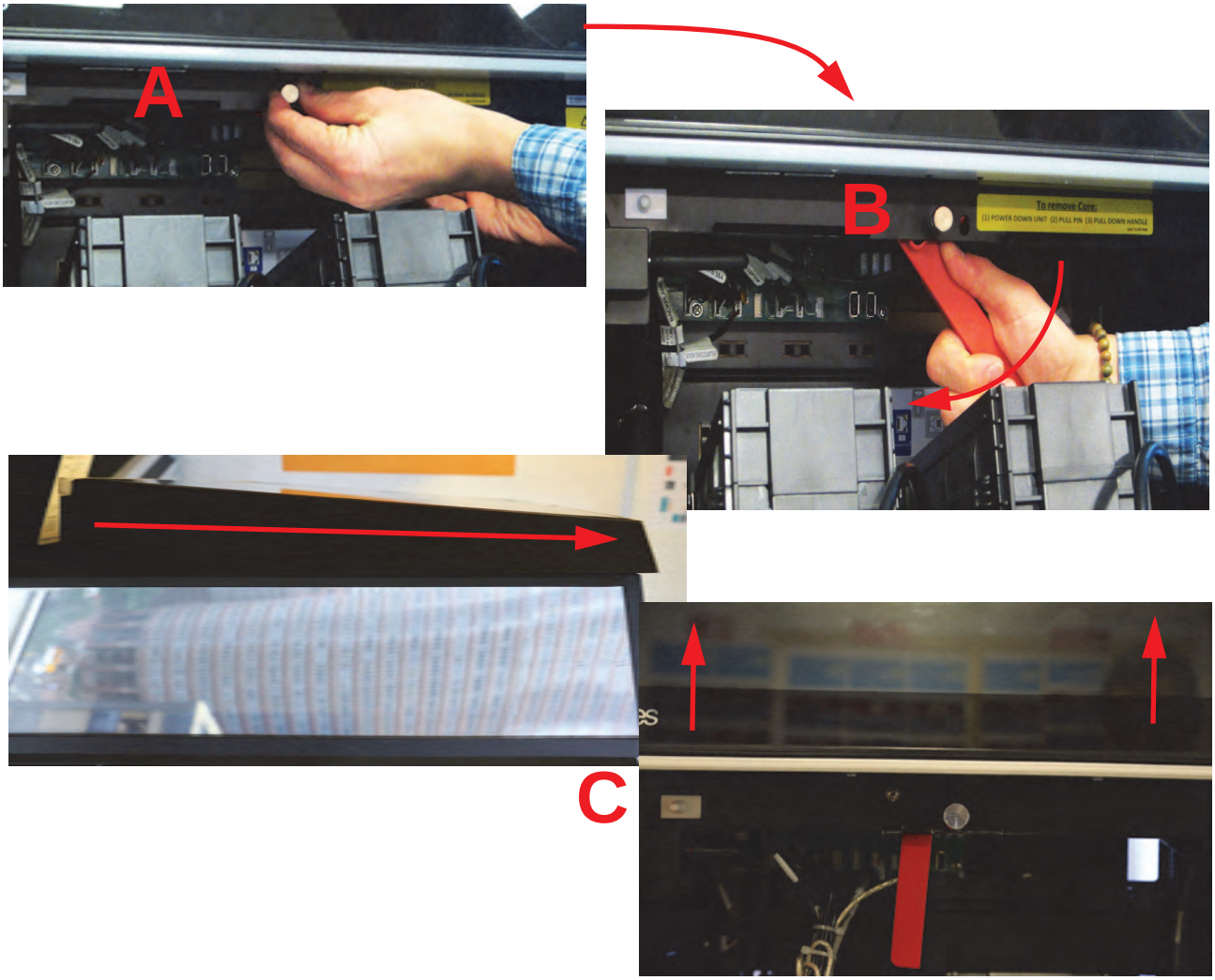
   If installing on drywall or concrete, use wall anchors designed to support at least 50lbs each, then fasten the chassis to the wall by inserting the screws through the holes in the chassis, and into the anchors.



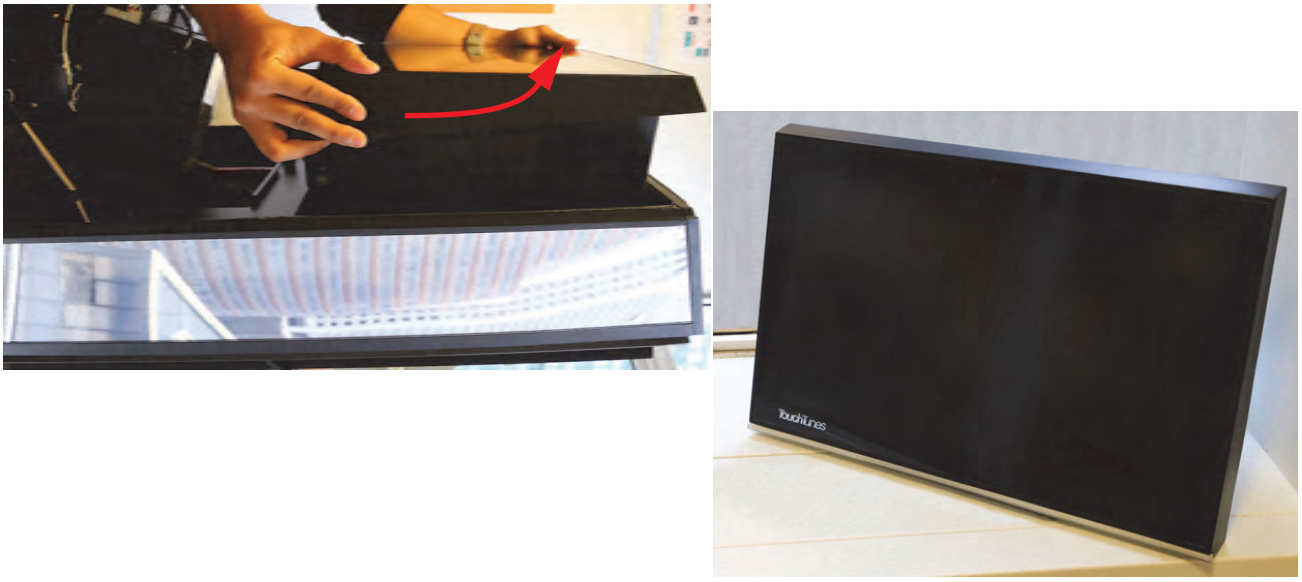
5. With Playdium lying on its back, and using the provided key (two are included in the parts kit packaged with your Playdium) unlock the payment panel and open it to reach the lever below the core.



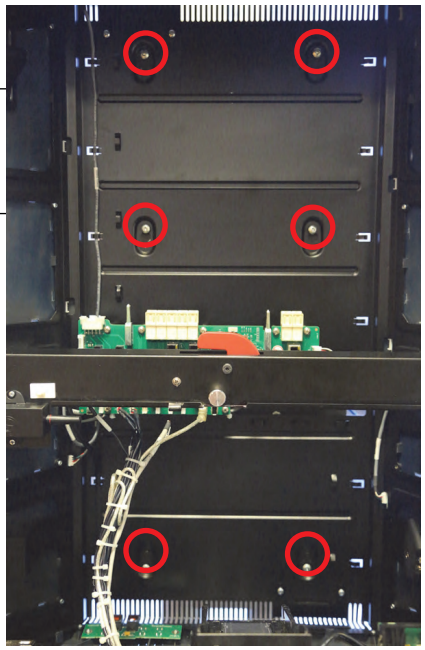
6. Pull the pin that keeps the lever from moving (**A**). Then, while still pulling on the pin, pull the lever down (**B**)to pop the core out of its connectors (**C**).



7. Lift the core, and carefully set it aside (on a table or counter) in the orientation shown below.



8. Lift the chassis with the payment means, and bring it up to the wall, hanging it on the two screws you installed earlier.



Note: Playdium MUST be mounted vertically when docking the core. Do not attempt to dock the core while the chassis is not mounted vertically. Failure to do so could damage the core or the chassis.

9. Fully fasten the chassis to the wall using four (4) extra screws, and tighten the two screws already installed.

Installing Playdium on a Floor Stand

A floor stand is available for mounting a Playdium, making it possible to install a Playdium in a venue where there is no available room on the wall. A Playdium on a floor stand can become a dramatic centerpiece for a bar, club or restaurant.

To order the Playdium Floor Stand, contact your TouchTunes Sales rep today, and request TouchTunes part #600205-001

The Playdium Floor Stand comes with its own installation and setup guide. Please refer to that guide if installing Playdium on a floor stand.

Installing the Core

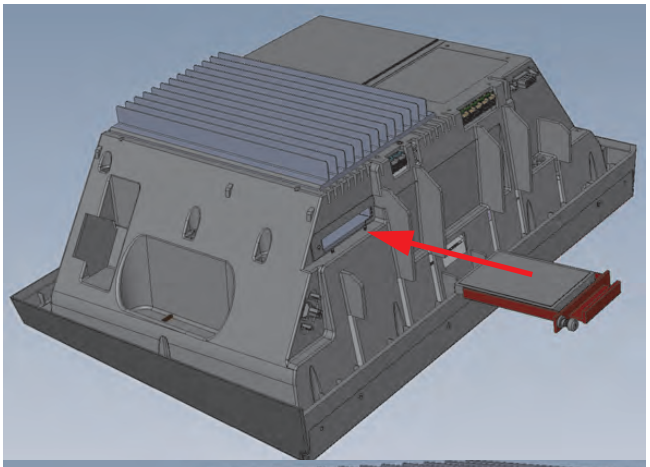
The core includes the jukebox computer, amplifiers, a touchscreen, and various other components.

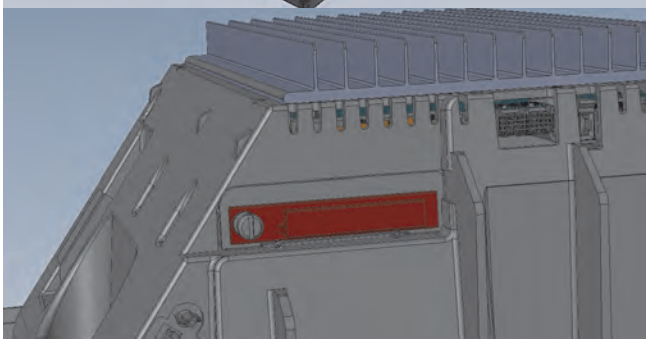
Installing the Hard Drive

Before docking the core back onto the chassis, you must install its hard drive.

Note: Follow proper grounding procedure before handling the hard drive. Failure to do so could lead to static discharge and damage to the hard drive.

1. Locate the hard drive. The hard drive and its enclosure are shipped separately from the main Playdium hardware.
2. Align the hard drive enclosure with its slot on the underside of the core.
3. Insert the hard drive enclosure in the slot and then gently push the enclosure in until it is completely seated.
4. Using your fingers, push in and then tighten the thumb screw (clockwise) on the hard drive tray until the thumb screw is securely tightened.
5. Test whether the hard drive is firmly seated by pulling out firmly on the handle of the hard drive tray.



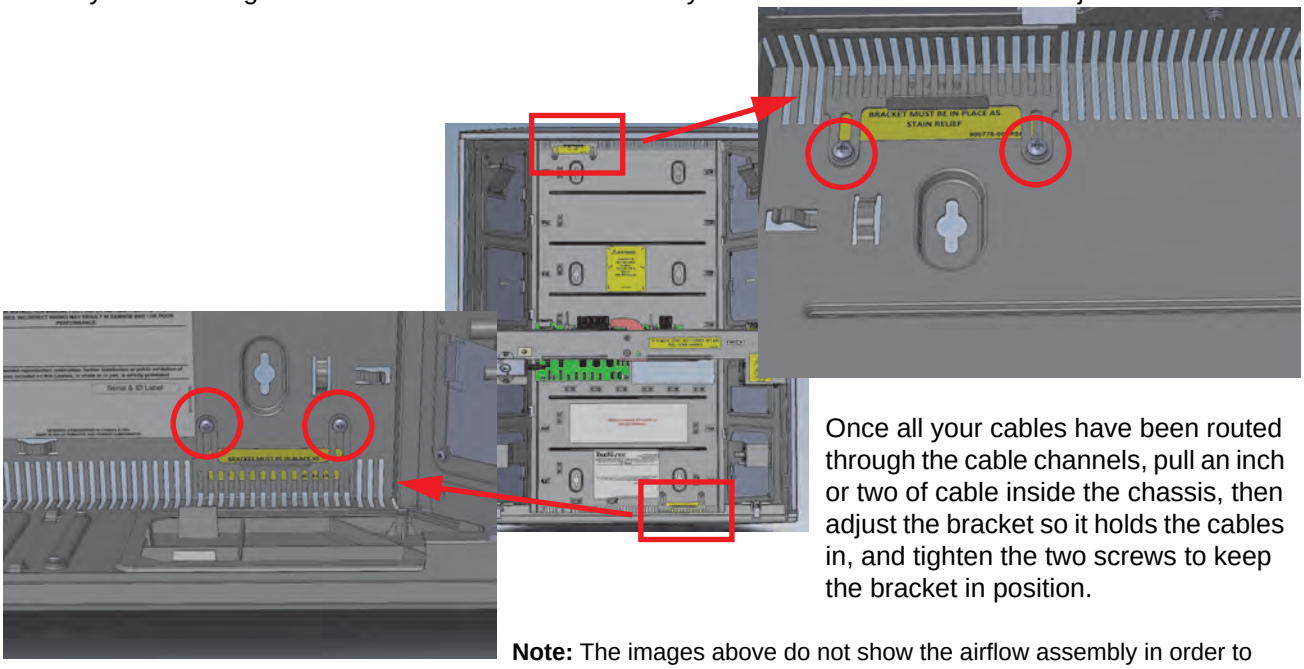


The hard drive is secured properly when:

- The spring on the thumb screw is completely compressed and covered by the cowl head of the thumb screw.
- There is no play between the hard drive and the core when you pull outward on the handle of the hard drive tray.

Accessing the Cable Channel

1. Playdium is designed with two cable channels that let you route outside cables into the jukebox.



Once all your cables have been routed through the cable channels, pull an inch or two of cable inside the chassis, then adjust the bracket so it holds the cables in, and tighten the two screws to keep the bracket in position.

Note: The images above do not show the airflow assembly in order to make the top cable channel more visible.

Note: Route cables into and out of Playdium only through the provided cable channel openings. Do not route cables through any other openings in Playdium, such as air vents.

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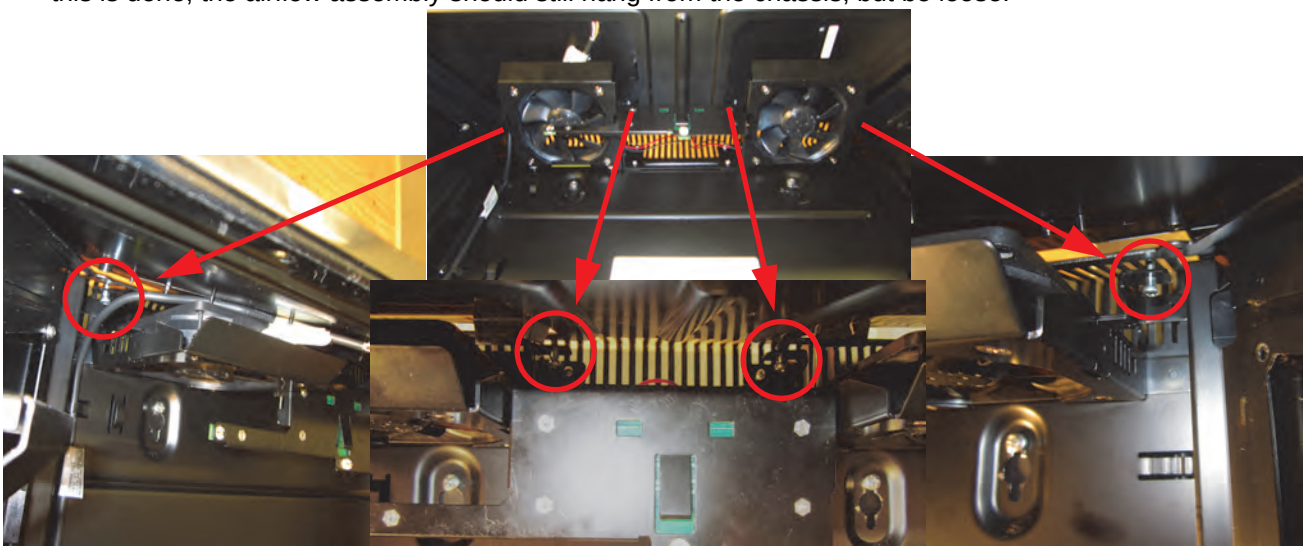
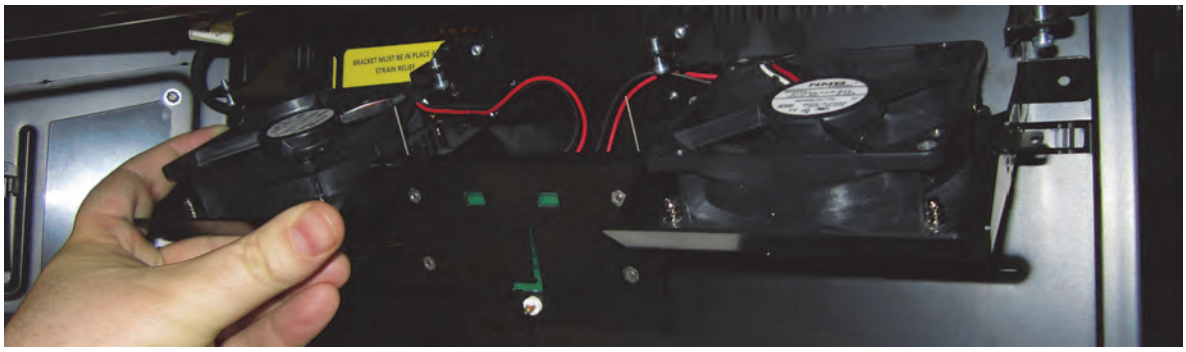
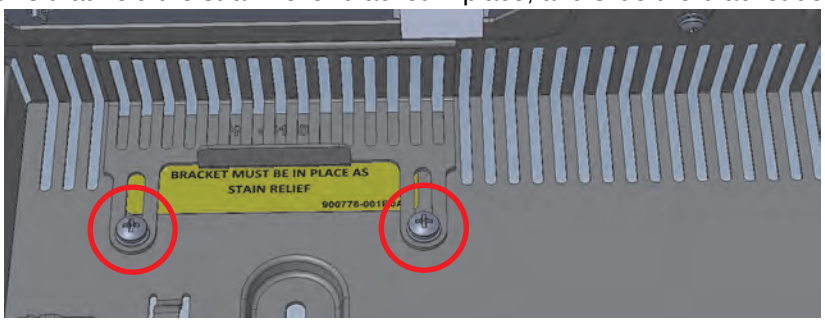
2. The bottom cable channel is more readily accessible, so it will mean less work if you can run all cables through the bottom channel.
3. To access the top cable channel, you must first unfasten the airflow assembly and pull it out of place. The airflow assembly is held in place by two hooks and four screws.
4. Loosen the four (4) screws above, until they are no longer pushing against the metal of the chassis. Once this is done, the airflow assembly should still hang from the chassis, but be loose.



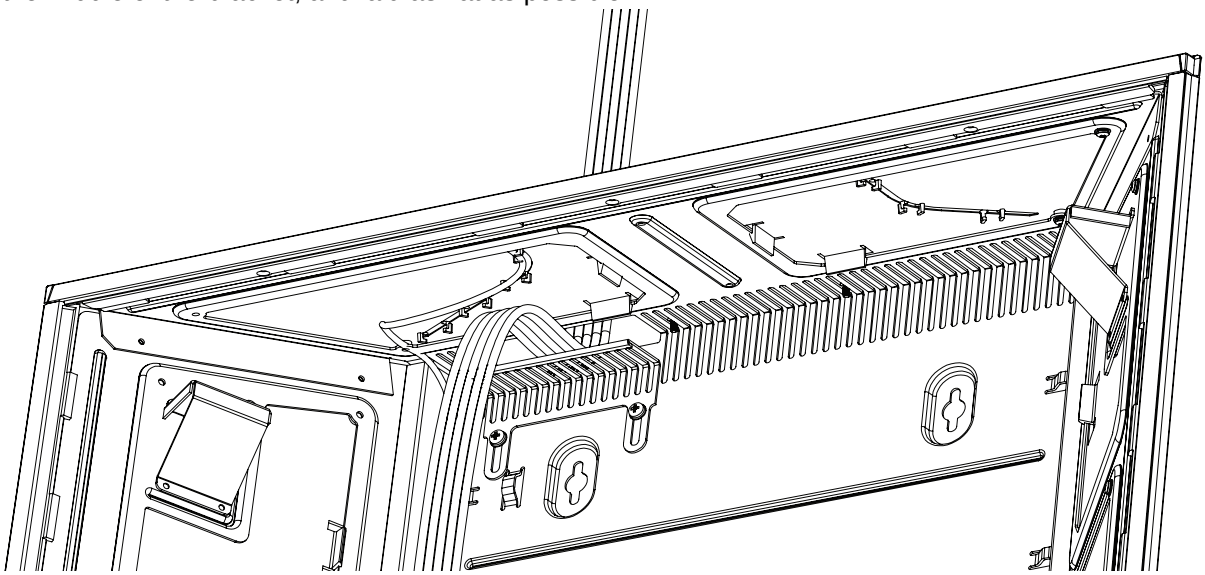
5. Now that the assembly is loose, push the back part up to unhook it from the chassis, then pull the assembly out.



6. Lay the airflow assembly down on the middle support bar.
7. Loosen the screws that hold the strain relief bracket in place, and slide the bracket down.

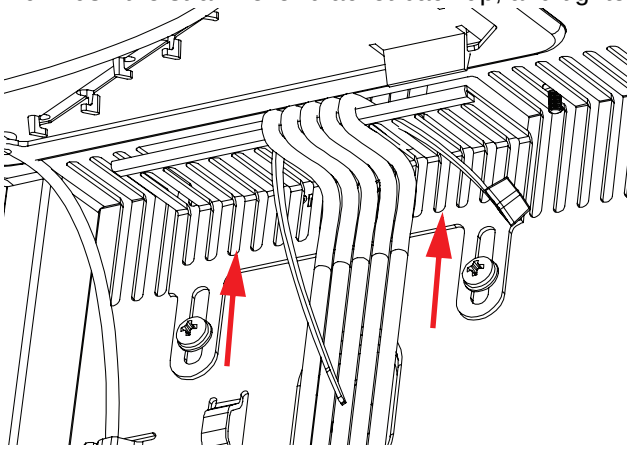


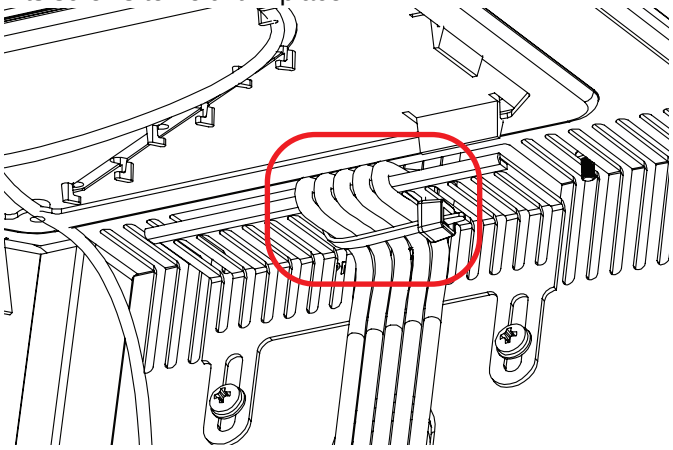
8. Route any cables that need to be routed through the top cable channel. The cables should be routed along the middle of the bracket, and laid as flat as possible.



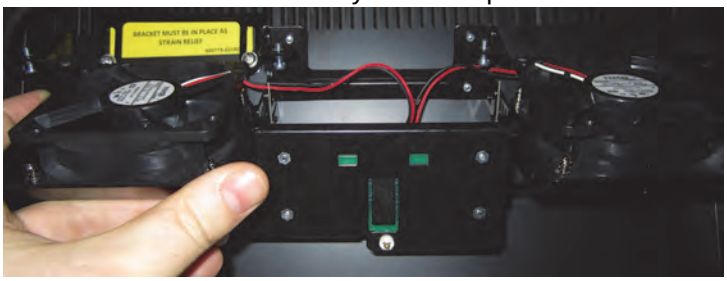
9. Verify that there is enough slack in the wires as you connect them to the backplane board.

10. Push the strain relief bracket back up, and tighten its screws to hold it in place.

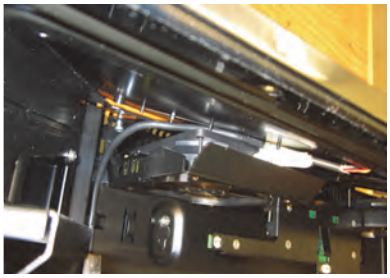




11. Use a tie-wrap to hold the wires to strain-relief bracket. This will make it easier to reinstall the airflow assembly.
12. Hook the Airflow Assembly back into position on the chassis.



You will have to slide the left side in first, and behind the cable for the top lighting panel.



13. Tighten the four screws until they push against the metal of the chassis. Once this has been done to all four screws, the airflow assembly should be secured to the chassis, and you should not be able to move it (with the exception of the middle flap.) The screws do not need to go in all the way; they only need to push up against the chassis.

Note: The airflow assembly should not be disconnected, unless you are replacing a damaged assembly. The airflow assembly is required to prevent the temperatures inside Playdium from exceeding acceptable levels.

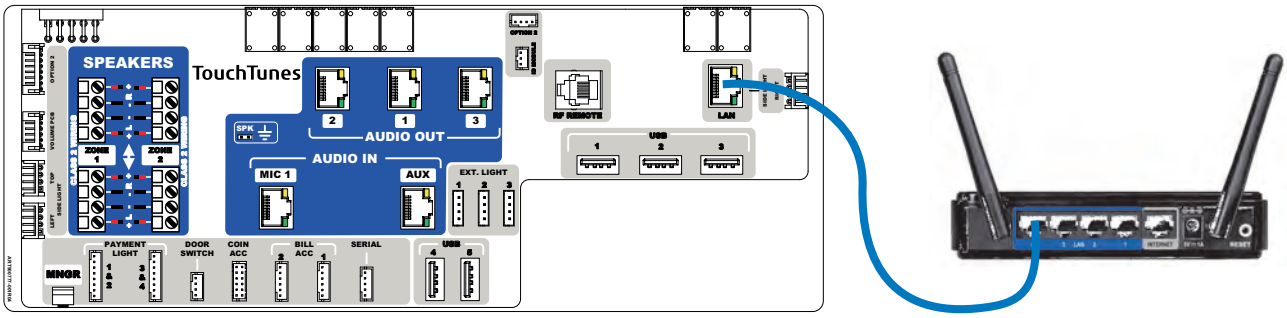
---

14. To route cables through the bottom cable channel, loosen the screws that hold its strain-relief bracket and slide it until you can run your cables through. Remember to slide the cover back into place and tighten its screws again when you are done. Also remember to leave enough slack on the cables to avoid any strain on the cables and connectors.

Connection to Broadband Network

1. Locate the Ethernet cable for the broadband connection.
2. Connect either end of the cable to a broadband modem or router.
3. Route the free end of the cable into Playdium through the cable channel.

4. Connect the free end of the cable to the port labeled **LAN** on the I/O board.



In the next chapter, you will configure the communications settings for the broadband network so Playdium can contact the TouchTunes server using this connection.

Connecting Audio Speakers

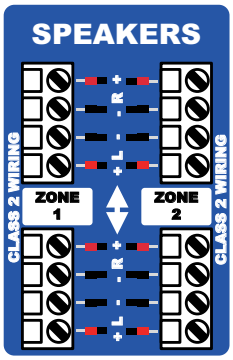
1. Prepare your speaker wires by stripping the ends of the 4 connector wires, exposing approximately 1/4” of wire.

Note: Class 2 wiring must be used for connecting the speakers to Playdium.

2.Locate the supplied four-slot Euroblock connector.

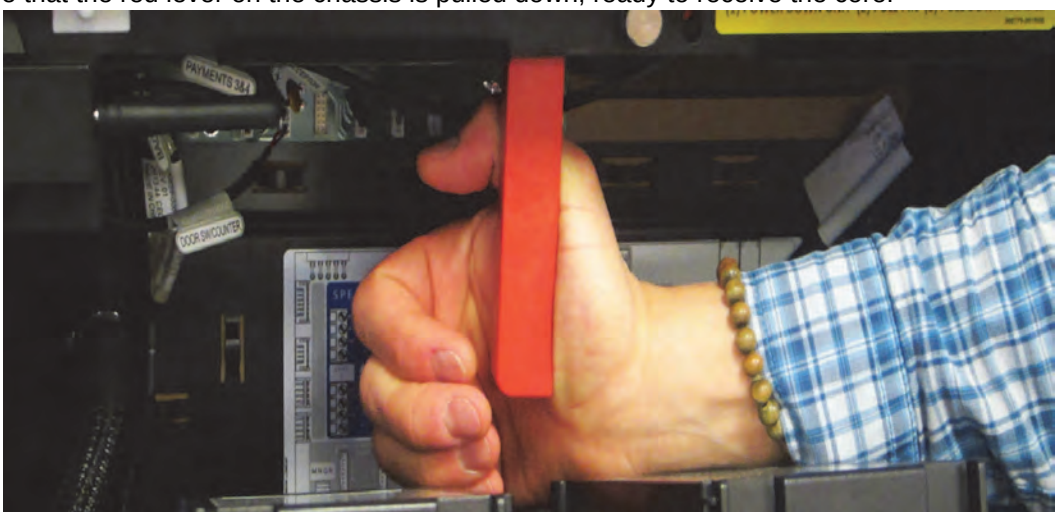
3.Loosen the screws along the top of the connector using a flat-head screwdriver, if necessary.

4. Wire the ends of the speaker wires to the Euroblock connector using the following figure as a guide.
5. Using a flat-head screwdriver, tighten the screws of the slots to secure the speaker cable to the connector.
6. Insert the Euroblock connector into the connector labeled Zone 1 or Zone 2 on the I/O board.
7. Route the free end of the cables out of Playdium through the appropriate cable channel.
8. Connect the other end of the cables to the speakers, ensuring that proper polarity is respected. Incorrect connection can result in poor imaging and thin sound.

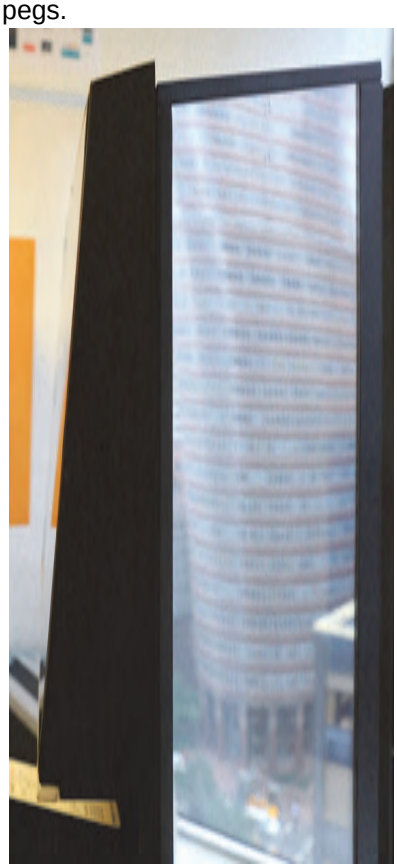


Install the Core

1. Before you install the core, remember to adjust and tighten the cable strain relief brackets for the two cable channels.
2. Bring the core close to the mounting location.
3. Ensure that the red lever on the chassis is pulled down, ready to receive the core.



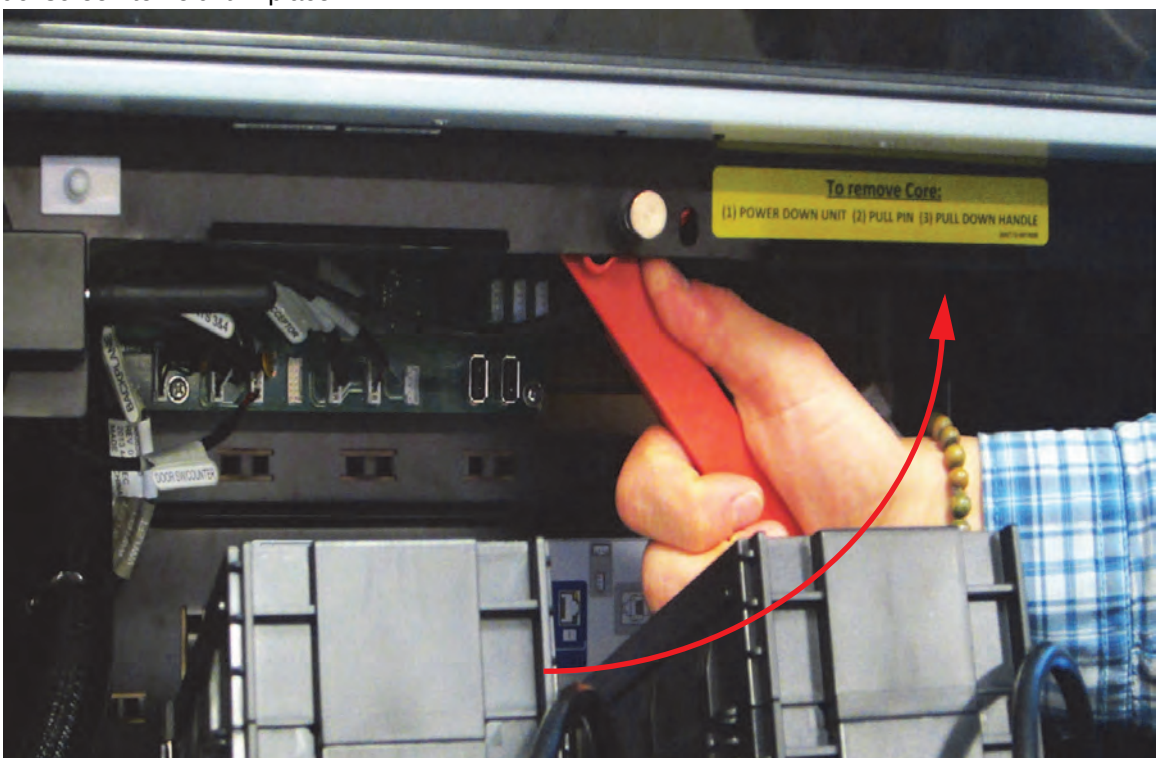
4. Lift the core, and position on the chassis, above the alignment pegs.



5. Slide the core down onto the pegs and mating connectors.
6. With one hand holding the core to prevent it from dropping suddenly, use your other hand to pull the pin that holds the red lever in place.

Note: You must hold the core to prevent it from dropping suddenly when the pin is pulled, otherwise the core can fall suddenly onto the fingers that are pulling the pin.

7. Push the red lever back up to pull the core down into its final position, while keeping a hand on the touchscreen to hold it in place.



8. The core comes down and snaps into place. Once the red lever is horizontal, the pin also snaps into place to secure the lever.

Connect the Power

Connect the AC power cord from the rear of Playdium to a properly-grounded (3-prong) electrical outlet.

Next...

The next step is to turn on the jukebox and proceed with the software setup. This is covered in the next chapter, Software Setup.

3 Software Setup

This chapter explains how to setup the software of a newly-installed Playdium jukebox.

Topics

Booting Up

Activation and Network Configuration

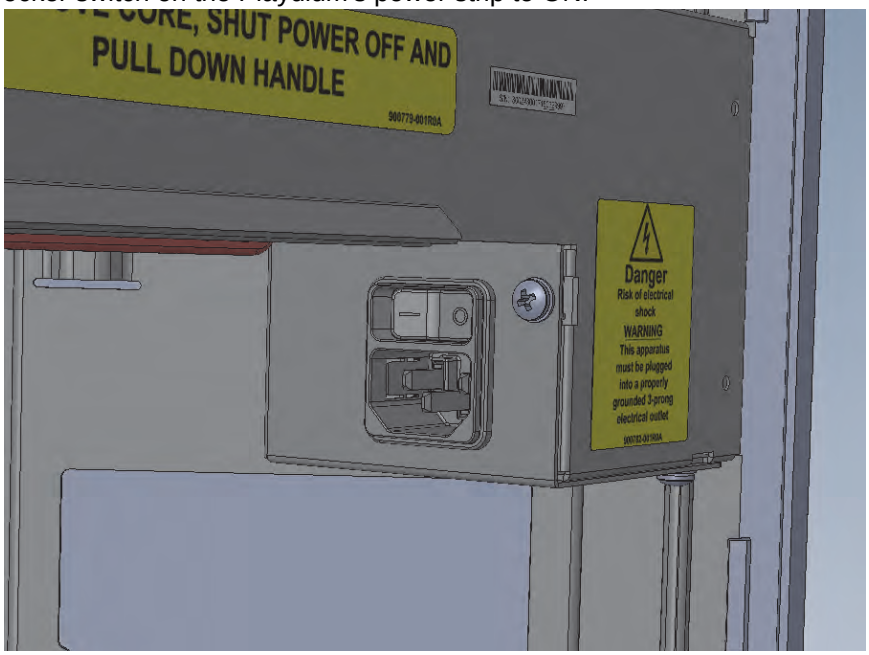
Settings on the Manager Screen

Booting Up

Now that you have made all the necessary connections, it is time to turn on Playdium.

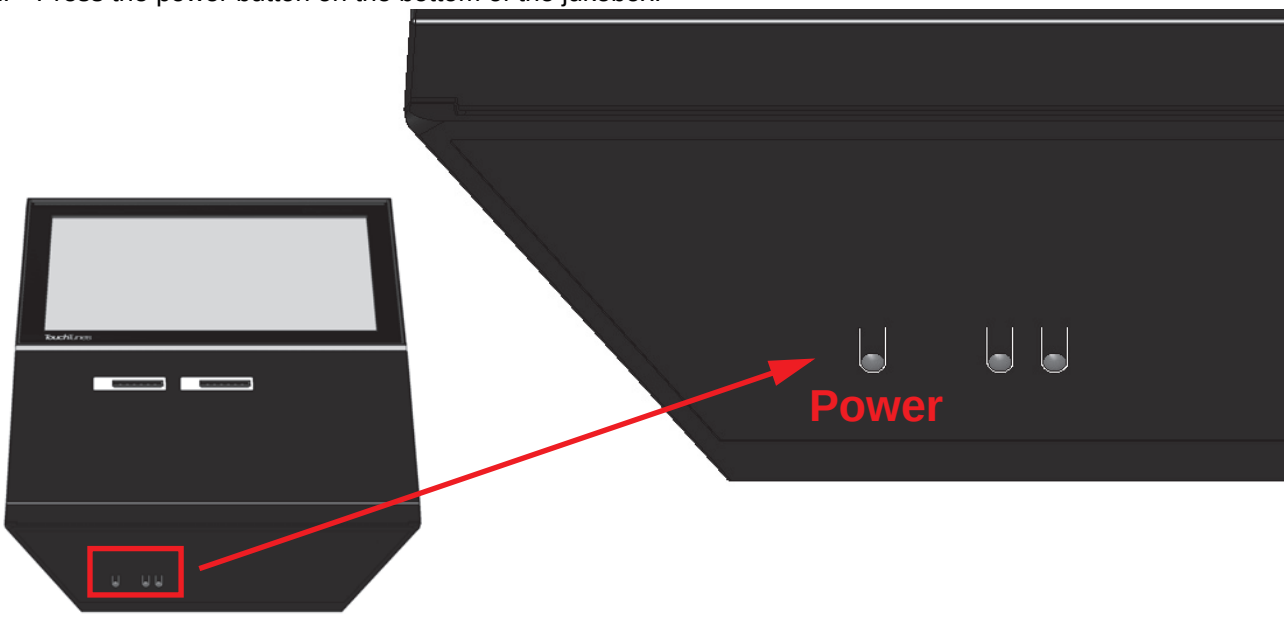
CAUTION: Do not power up Playdium immediately after transferring the unit from a cold place to a warm place as condensation may have occurred on internal components. Wait for the unit to reach room temperature before using it.

1. Set the power rocker switch on the Playdium's power strip to ON.



Note: When you power up a Playdium for the first time, it automatically goes into night mode: the computer and other internal components of Playdium are running, but the touchscreen, audio system and lights for Playdium are disabled. Bring Playdium out of night mode and activate its screen before setting it up.

2. Press the power button on the bottom of the jukebox.



When you press this button, the touchscreen, lights and audio system for Playdium are activated.

The Software initialization screen appears indicating that Playdium is starting the installation process.

You can now use the touch screen to activate Playdium and configure its settings using the system software. Follow the prompts on the screen to complete activation.

Activation and Network Configuration

Note: Booting the system can take up to ten (10) minutes, and the screen can be blank for up to 90 seconds during the installation procedure. It is extremely important that you do not power down or attempt to reboot Playdium during this procedure, or you risk corrupting and rendering the hard drive unusable.

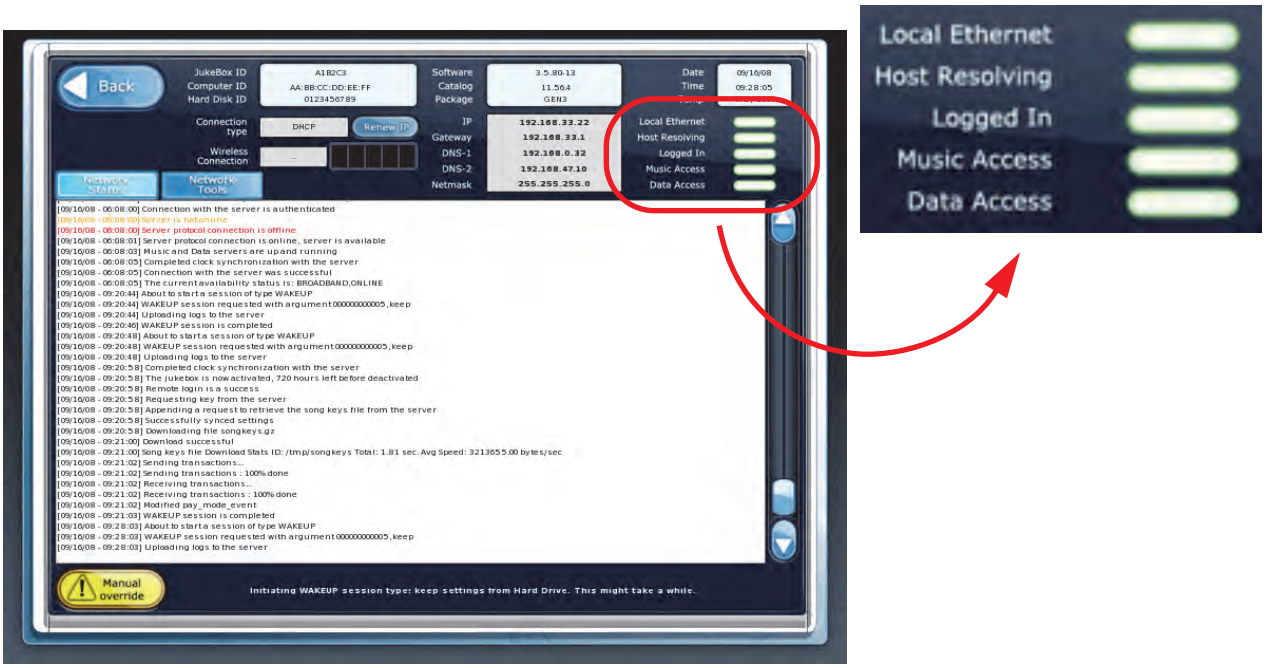
Calibrate the Touch Screen

After the software installation process completes, the first calibration screen appears. Follow the on-screen prompts to calibrate the touch screen.

Initial Settings

In the settings screens, you select the settings for Playdium, such as primary language, calling window and type of broadband connection.

After you specify the settings, a Communications Network status lights indicator with activity messages appears.



What the network status lights indicate:

- **Local Ethernet:** whether an ethernet cable is properly connected to the jukebox, and the jukebox is receiving a signal from it.
- **Host Resolving:** whether the jukebox is connected to the internet.
- **Logged In:** whether the jukebox is logged into the TouchTunes server. The jukebox must be able to log into the TouchTunes server to receive activation information and perform transactions, such as returning daily sales information.
- **Music Access:** whether the jukebox can access music from the TouchTunes server. The jukebox must have music access to download new songs.
- **Data Access:** whether the jukebox can communicate with TouchTunes server to receive updates from the TouchTunes Dashboard. The jukebox must have data access to receive any new settings you may have made to it via the TouchTunes Dashboard.

For installation and activation, the jukebox needs the Logged In, Music Access and Data Access indicators to be green.

When the jukebox is fully initialized, the Attract Screen of the Customer Interface appears.

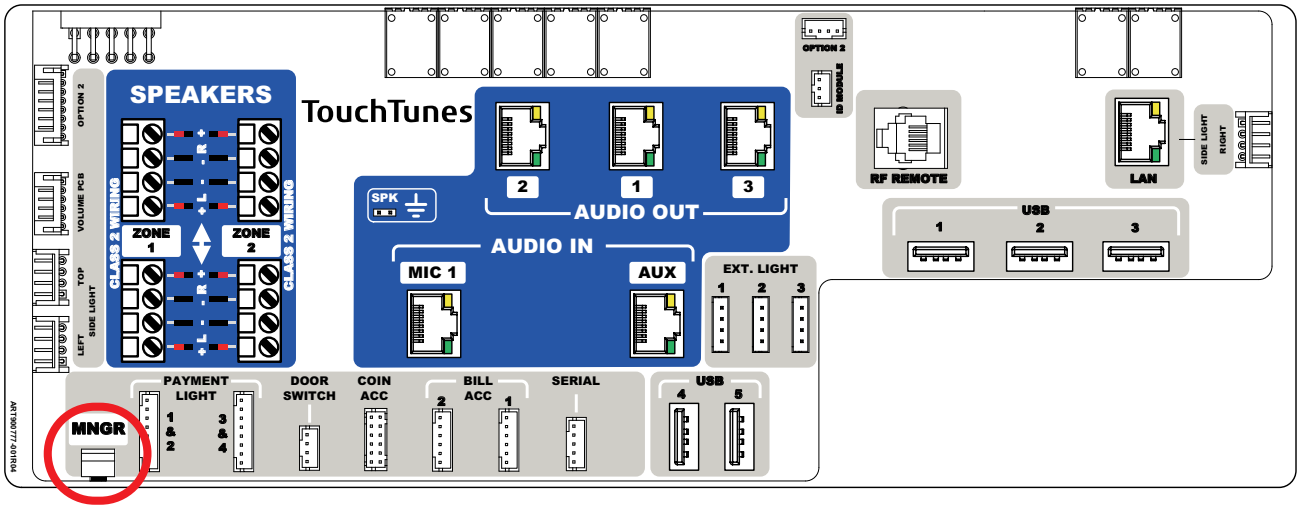
Settings on the Manager Screen

Call Now

After you activate Playdium, ensure you perform a “Call Now” so that your jukebox is equipped with the most up-to-date software.

To do this, access the Diagnostics menu of the Operator Interface.

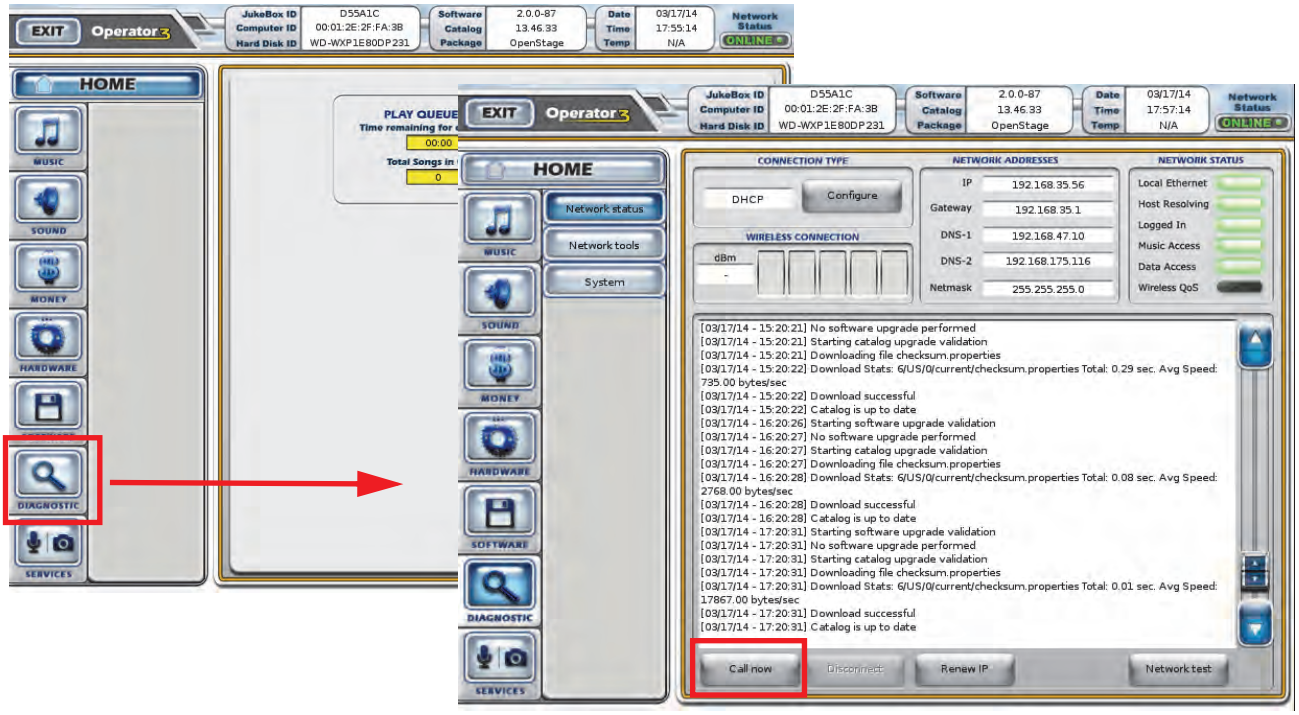
1. Locate the Manager button on the backplane.



2. Press and release the Manager button.

Playdium displays the Operator main menu.

3. From the Main menu, select the Diagnostic button.



4. Press the Call now button at the bottom of the menu.

Playdium communicates with the TouchTunes servers and downloads the most recent software build. This process can take a few minutes, after which the jukebox will reboot, install the new software, then reboot again, this time with the updated software.

Remote Control

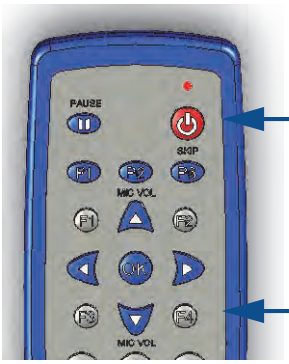
The remote control is powered by two 1.5V AAA batteries. Insert the batteries in the compartment on the rear of the remote. Use only high-quality alkaline batteries.

Use the mounting bracket to install the remote control on a wall for easy access.

Fasten the bracket to the wall with two screws as illustrated.

By default, the remote control ID is set to 000. To change the remote control ID:

1. Press the **POWER** and **F4** keys at the same time and hold them down until the red indicator light blinks two times.

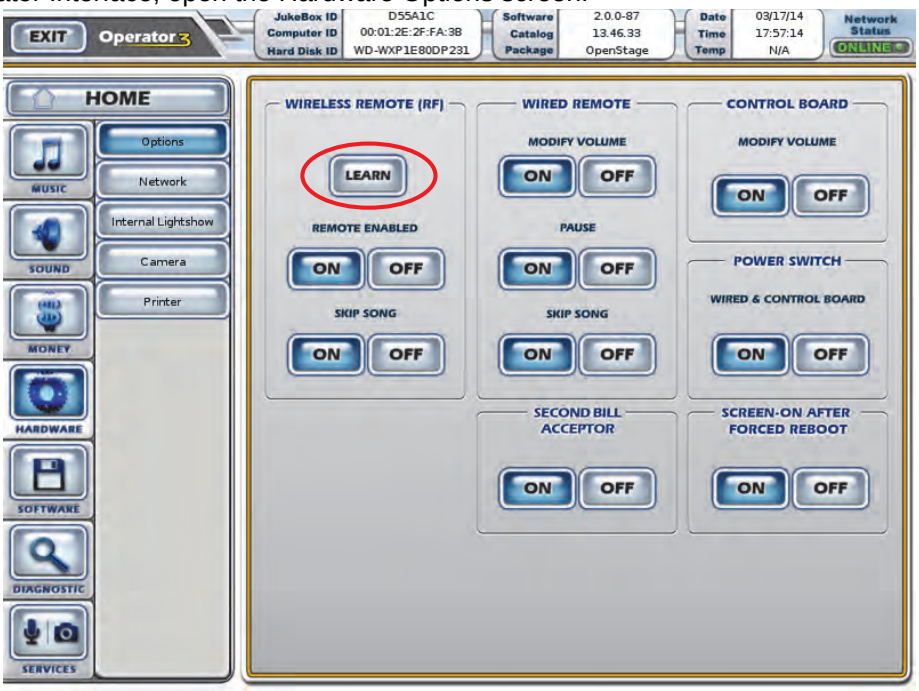


Press and hold to set remote control ID.

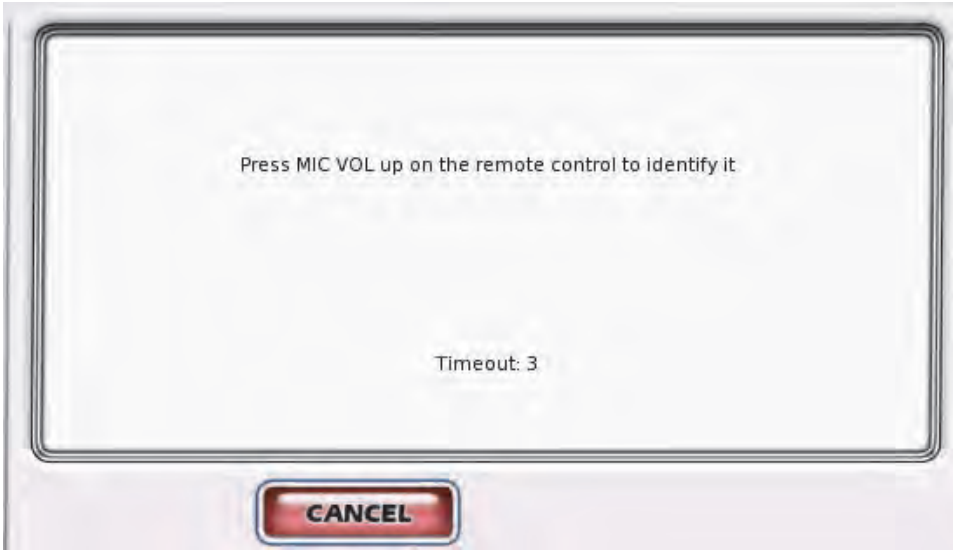
2. Enter the new three-digit code to use. The new code must be in the range **000** to **255**.
3. The red indicator light will light up for three seconds to confirm your selection. If you enter an invalid code the light will blink five times.

Learn the Remote ID

1. On the Operator Interface, open the Hardware Options screen.



2. Press the **LEARN** button.
3. Watch the display. When prompted, press the **MIC VOL UP** key on the remote control.



The screen displays a success message and returns to the Options screen.

4. Test the remote by raising and lowering the jukebox volume as it is playing.

Pre-programmed Remote Control Keys

Key	Function
Power	Press to turn the jukebox monitor and audio subsystem on or off. The jukebox computer remains on. Equivalent to pressing the Night Mode button on the jukebox
Pause	Pauses the jukebox.
Numeric keys 0 - 9	Used to program the remote and other features.
MIC VOL	Raises and lowers the volume of the microphone within the limits set on the Mixer Settings screen. Also used to navigate up/down on some screens.
P1	Give promotional credit: Press and release this button to add a credit to the jukebox. Credits are deducted from the promotional credit count. The promotional credit feature is enabled/disabled on the Credit Settings screen.
P2	For future use.
P3/Skip	Skip song: Quickly press and release to stop playing the current song and immediately skip forward to the next song in the queue. The skip song feature is enabled/disabled on the System Settings screen. Flush play queue: Press and hold this button for four seconds to flush the entire play queue.
VOLUME ZONE 1, 2, 3	Raises and lowers the volume of the selected zone within the limits set on the Sound Mixer screen.
F1, F2, F3, F4	For future use.
Left-arrow, right-arrow, OK	Used to navigate left/right and select options on some screens.

Closing the Payment Door

1. Close the Playdium payment panel by pulling it up and shut, then pressing on its front face to engage the locking mechanism.

2. Secure the payment panel by using the key to lock it closed.

With the software properly setup, the remote control synced to the jukebox, and the payment door closed, your new Playdium is now ready to start accepting money and start playing music.

4 Service and Maintenance

This chapter provides information about the service and maintenance of a Playdium jukebox.

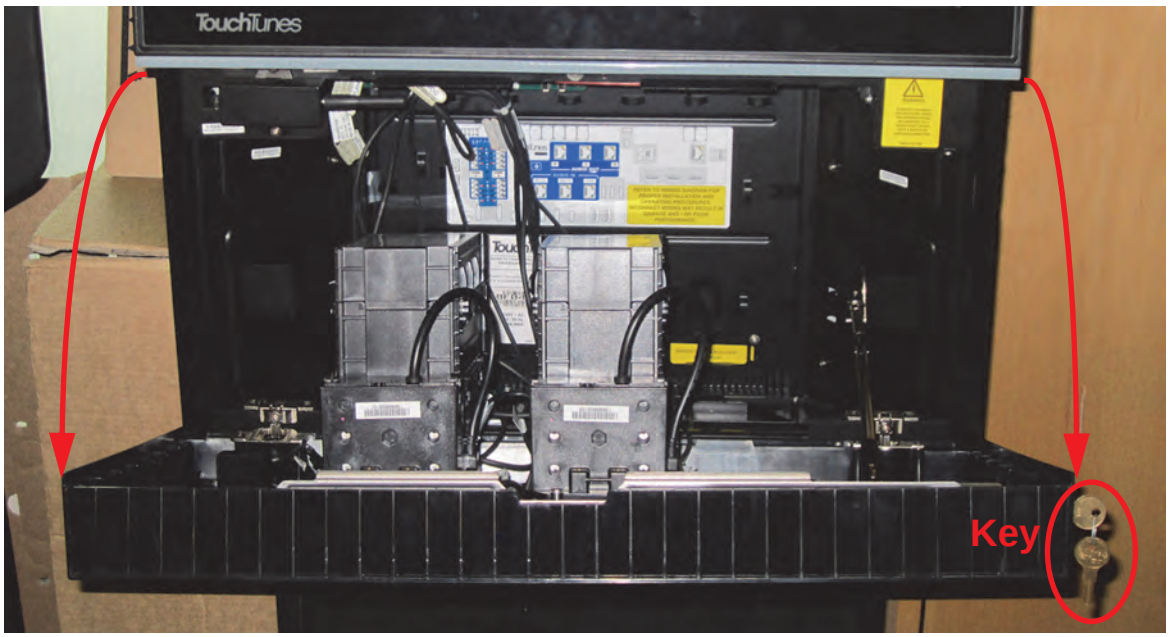
Topics

Collection
Replacing the Payment Means
Replacing the Core
Replacing the Chassis

Collection

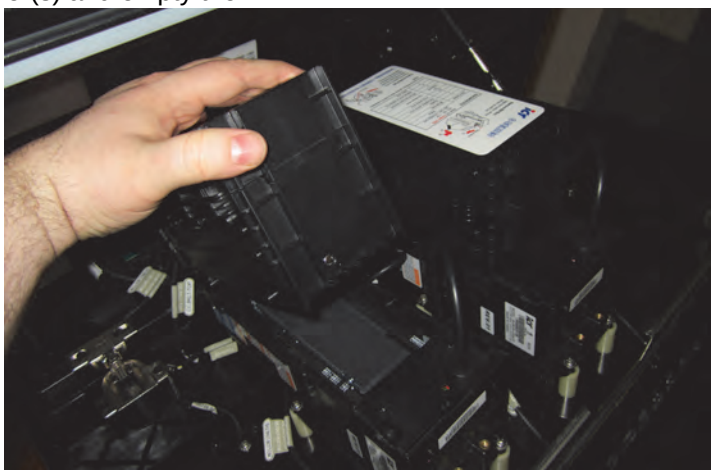
How to collect the bills from a Playdium jukebox:

1. Using the key that came with the jukebox, unlock the payment panel.

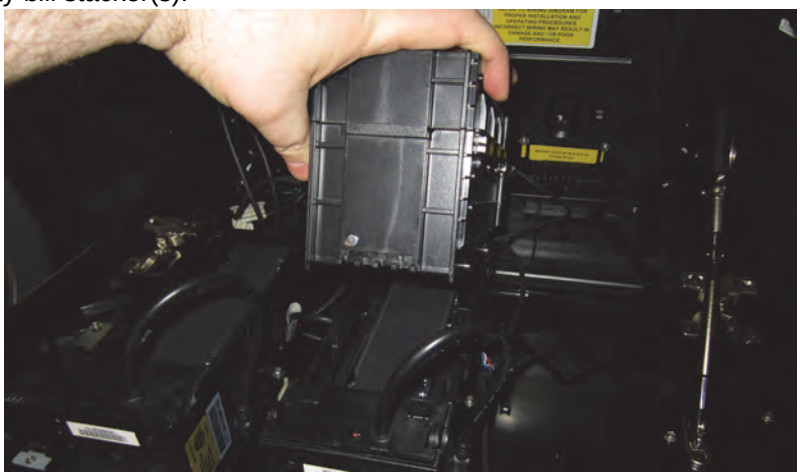


2. Open (pull down) the payment panel.

3. Remove the bill stacker(s) and empty them.



4. Replace the empty bill stacker(s).



5. Close the payment panel.
6. Lock the payment panel.

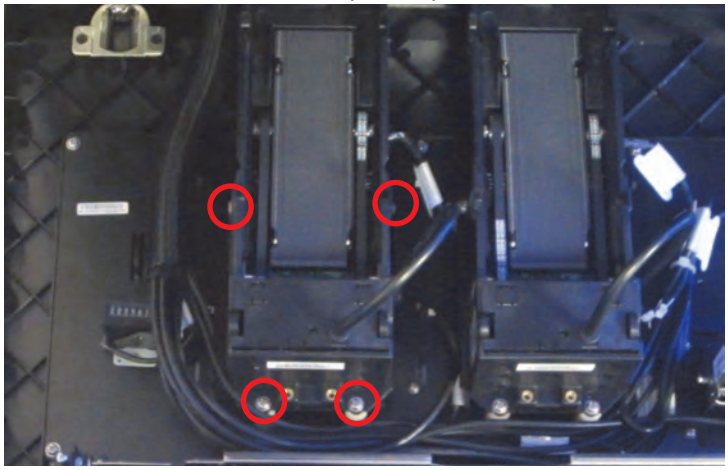
Replacing the Payment Means

Replacing a Bill Acceptor

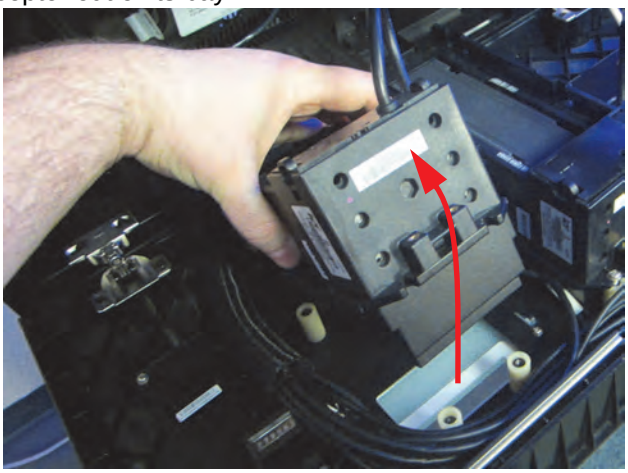
Follow the steps in the Collection section to access the bill acceptor(s), then the following to perform the replacement:

1. Remove the bill stacker.

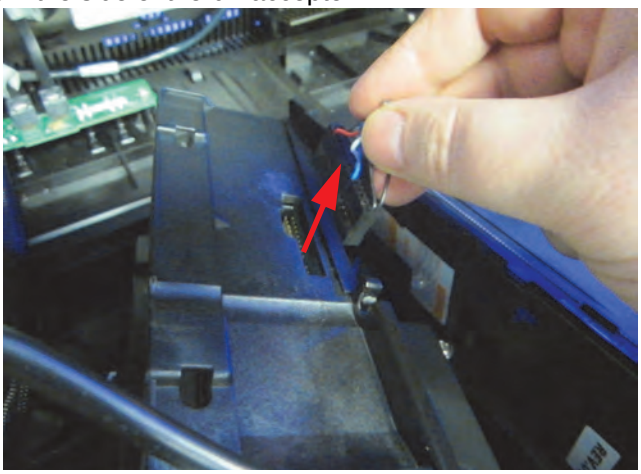
2. Remove the four (4) screws that hold the bill acceptor in place. Save those screws for later.



3. Carefully pull the bill acceptor out of its bay.

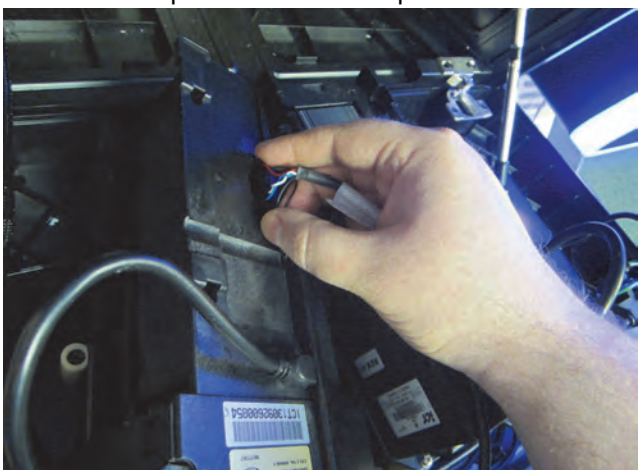


4. Disconnect the cable from the side of the bill acceptor.

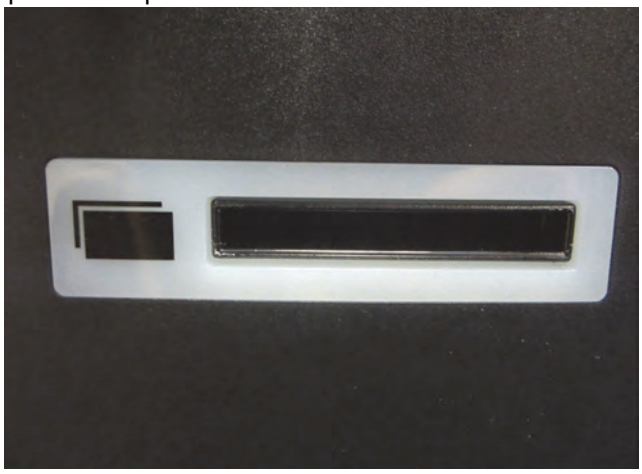


The malfunctioning bill acceptor can now be removed, and a new one can take its place.

5. Connect the cable to the side of the replacement bill acceptor.



6. Position the bill acceptor in its bay. It can help to pull the payment door up to look at the front and see if the bill acceptor is properly aligned in its slot before you push it into place.



7. Fasten the bill acceptor to the payment plate, using the screws you set aside earlier.
8. Replace the bill stacker.

Replacing the Core

There are no user-serviceable parts within the core. All defective cores shall be returned to TouchTunes for warranty processing, once Techline has authorized and issued a Warranty Replacement (WR) #.

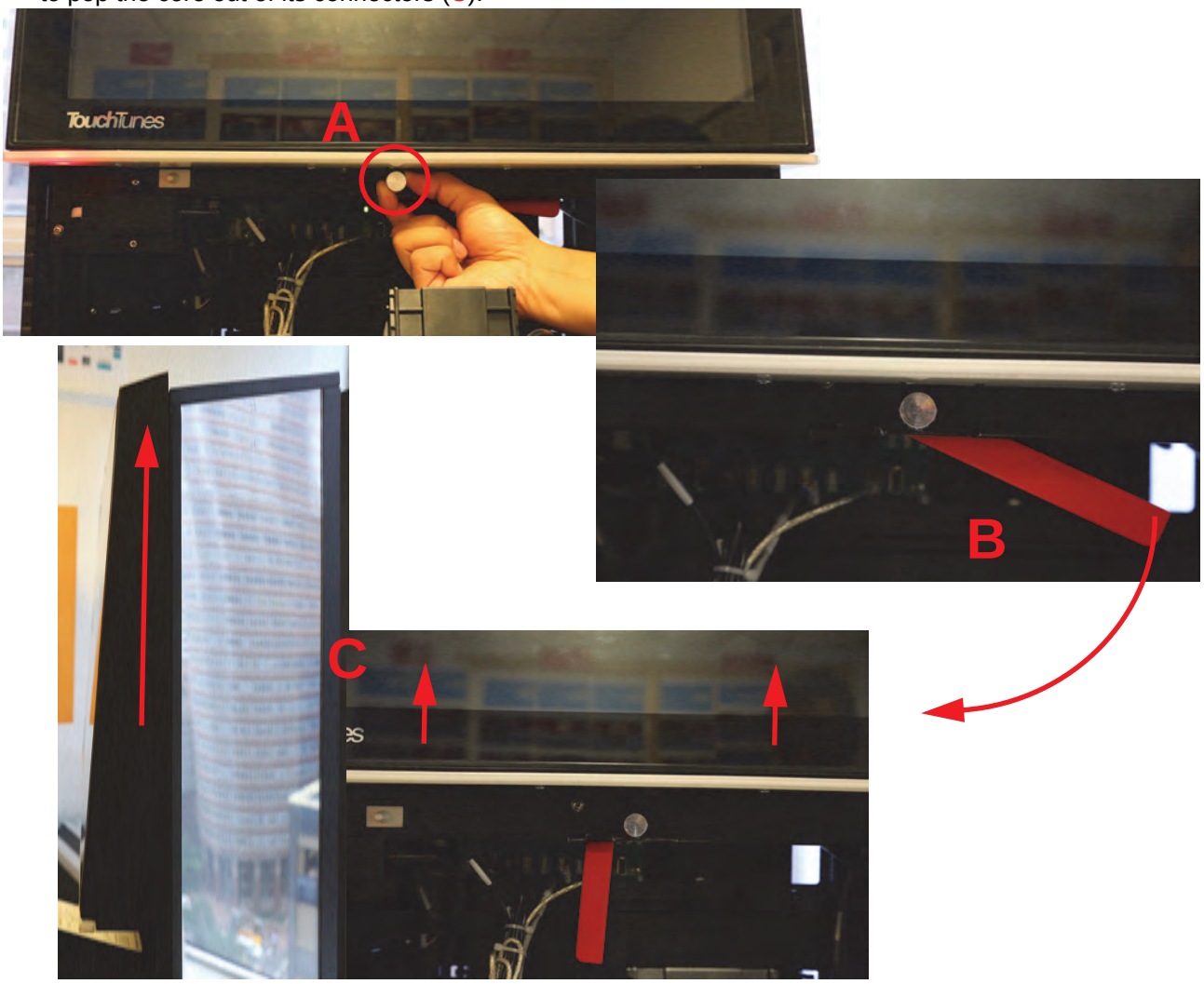
Removing the Previous Core

1. Unlock the payment panel and open it to reach the lever below the core.

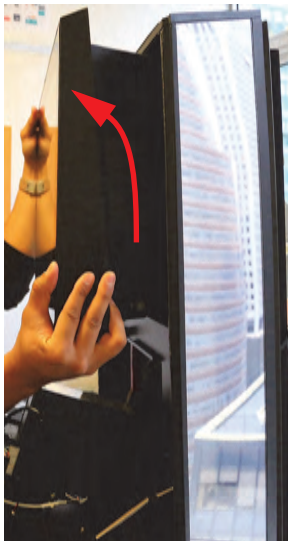
2. Set the power switch on the Playdium's power receptacle to **OFF**.

Note: Attempting to remove the core while the jukebox is powered will void your warranty, and is likely to damage the jukebox.

3. Pull the pin that keeps the lever from moving (**A**). Then, while still pulling on the pin, pull the lever down (**B**) to pop the core out of its connectors (**C**).

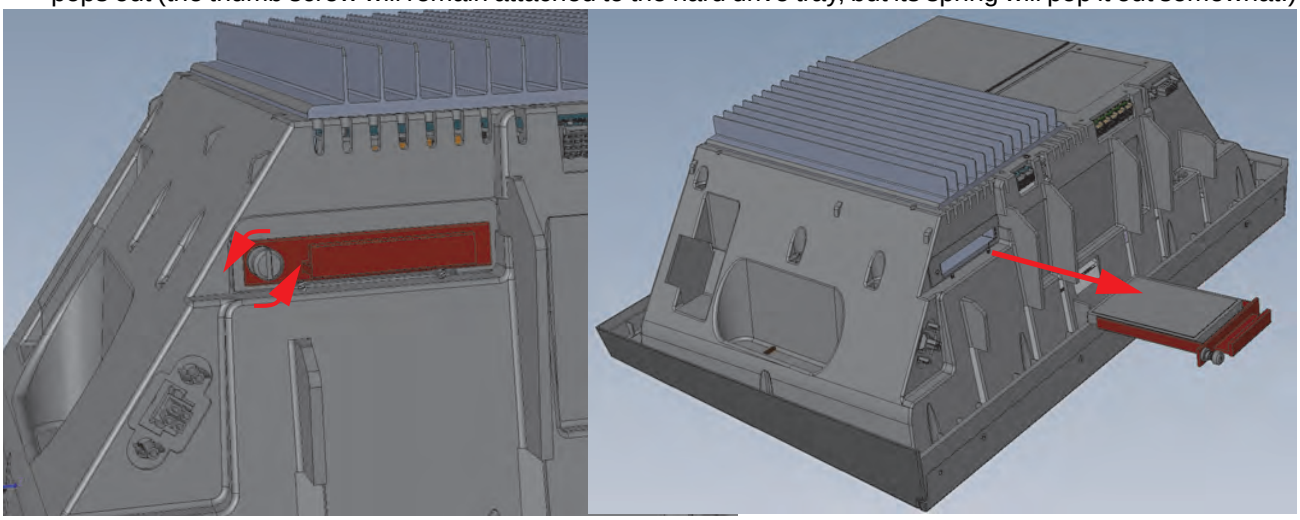


4. Lift the core, and carefully set it face down on a horizontal, flat surface (such as a table or a counter) covered by a soft cloth or similar, to avoid scratching or otherwise damaging the touch screen glass.



Removing the Hard Drive from the Previous Core

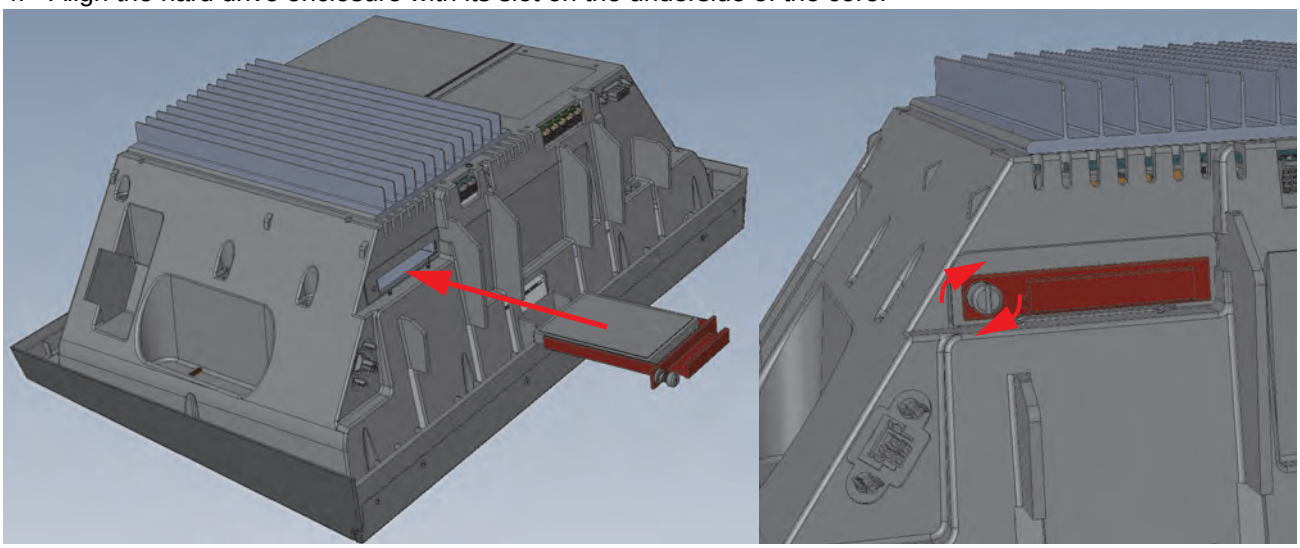
1. Follow proper grounding procedure before handling the hard drive. Failure to do so could lead to static discharge and damage to the hard drive.
2. Locate the hard drive.
3. Using your fingers, loosen the thumb screw (counter-clockwise) on the hard drive tray until the thumb screw pops out (the thumb screw will remain attached to the hard drive tray, but its spring will pop it out somewhat.)



4. Pull the hard drive out of its slot and set it aside.

Preparing the Replacement Core

1. Take the replacement core out of its packaging, if you have not done so already.
2. Carefully set the core face down on a horizontal, flat surface (such as a table or a counter) covered by a soft cloth or similar, to avoid scratching or otherwise damaging the touch screen glass.
3. Grab the hard drive you just took out of the previous core.
4. Align the hard drive enclosure with its slot on the underside of the core.



5. Insert the hard drive enclosure in the slot and then gently push the enclosure in until it is completely seated.
6. Using your fingers, push in and then tighten the thumb screw (clockwise) on the hard drive tray until the thumb screw is **securely** tightened.

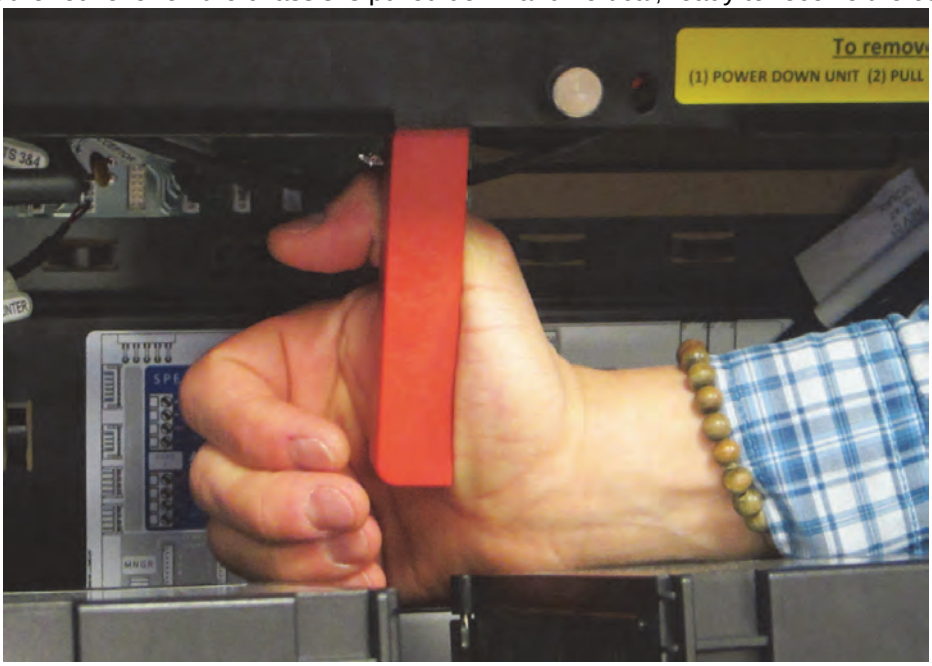
7. Test whether the hard drive is firmly seated by pulling out firmly on the handle of the hard drive tray. The hard drive is secured properly when:

- The spring on the thumb screw is completely compressed and covered by the cowl head of the thumb screw.
- There is no gap between the edge of the hard drive tray and the computer.
- There is no play between the hard drive and the computer when you pull outward on the handle of the hard drive tray.

Installing the Replacement Core

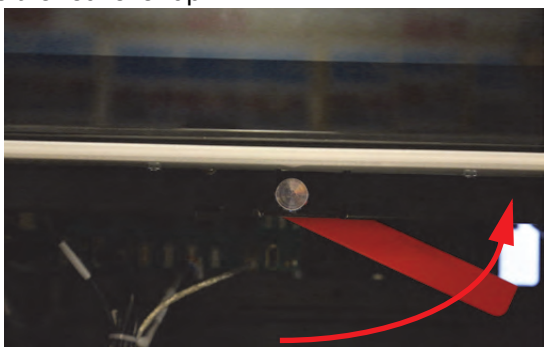
Note: Playdium MUST be mounted vertically when docking the core. Do not attempt to dock the core while the chassis is not mounted vertically. Failure to do so could damage the core or the chassis.

1. Ensure that the red lever on the chassis is pulled down and vertical, ready to receive the core.



2. Lift the core, and position on the chassis, above the red lever.

3. While using one hand to prevent the core from dropping down suddenly, use your other hand to pull the pin that holds the red lever in position, and then carefully move the red lever up.



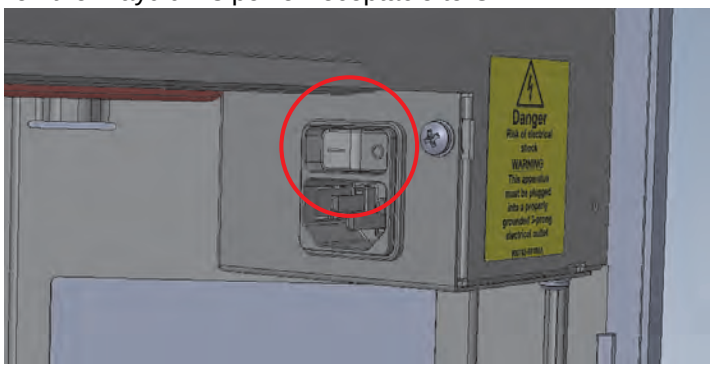
Note: You must hold the core to prevent it from dropping suddenly when the pin is pulled, otherwise the core can fall suddenly onto the fingers that are pulling the pin.

4. Once you have moved the lever enough, the pin will stay up. Release it, and use that hand to push the core into the chassis, while pushing the red lever up.
5. As you push the red lever up, the core will go down. When the red lever reaches horizontal, the core will be in its final position, and the pin will snap into place.

Finishing Up

CAUTION: *Do not power up Playdium immediately after installing a core that was brought in from a cold place into a warm place, as condensation may have occurred on internal components. Wait for the unit to reach room temperature before using it.*

1. Set the power switch on the Playdium's power receptacle to **ON**.



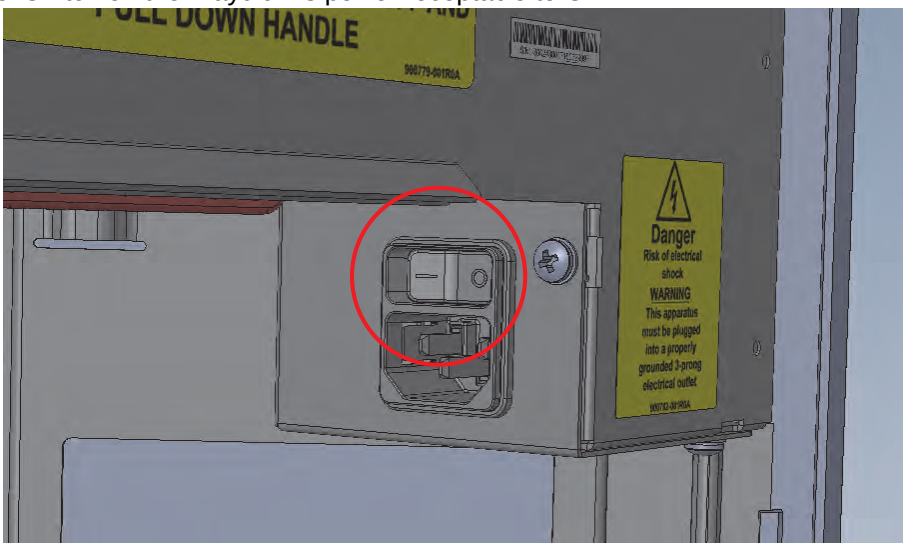
2. Close the payment panel by gently pulling it up and shut, then pressing on its front face to engage the locking mechanism.
3. Secure the payment panel by using the key to lock its case.

Replacing the Chassis

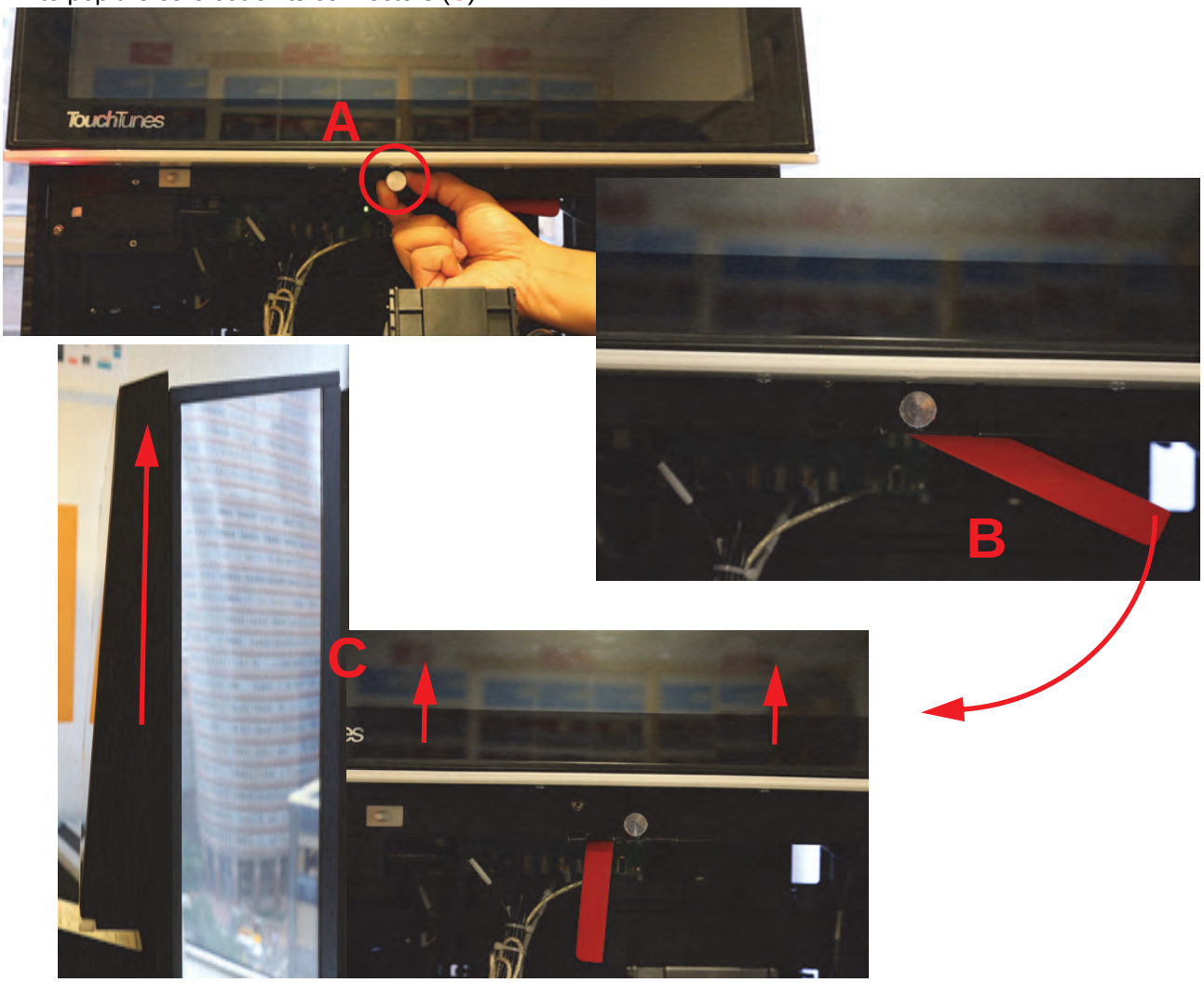
If you have determined that the chassis needs to be replaced, these steps should be followed:

1. Unlock the payment panel and open it to reach the lever below the core.

2. Set the power switch on the Playdium's power receptacle to **OFF**.

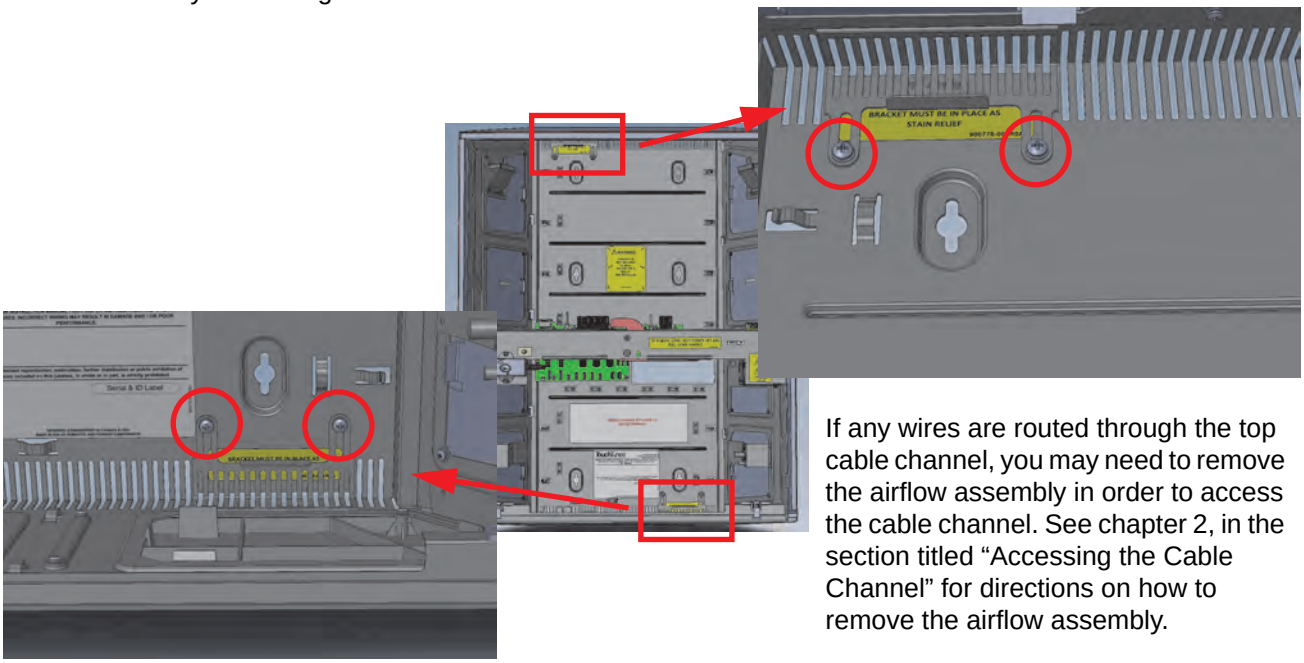


3. Pull the pin that keeps the lever from moving (**A**). Then, while still pulling on the pin, pull the lever down (**B**) to pop the core out of its connectors (**C**).



4. Lift the core, and carefully set it face down on a horizontal, flat surface (such as a table or a counter) covered by a soft cloth or similar, to avoid scratching or otherwise damaging the touch screen glass.

5. Remove the payment means (see the sections on Replacing the Payment Means for more on how to remove the bill acceptor(s))
6. Loosen the screws on the wire strain relief brackets in the cable channels, and loosen the brackets so cables can be freely run through the channels.

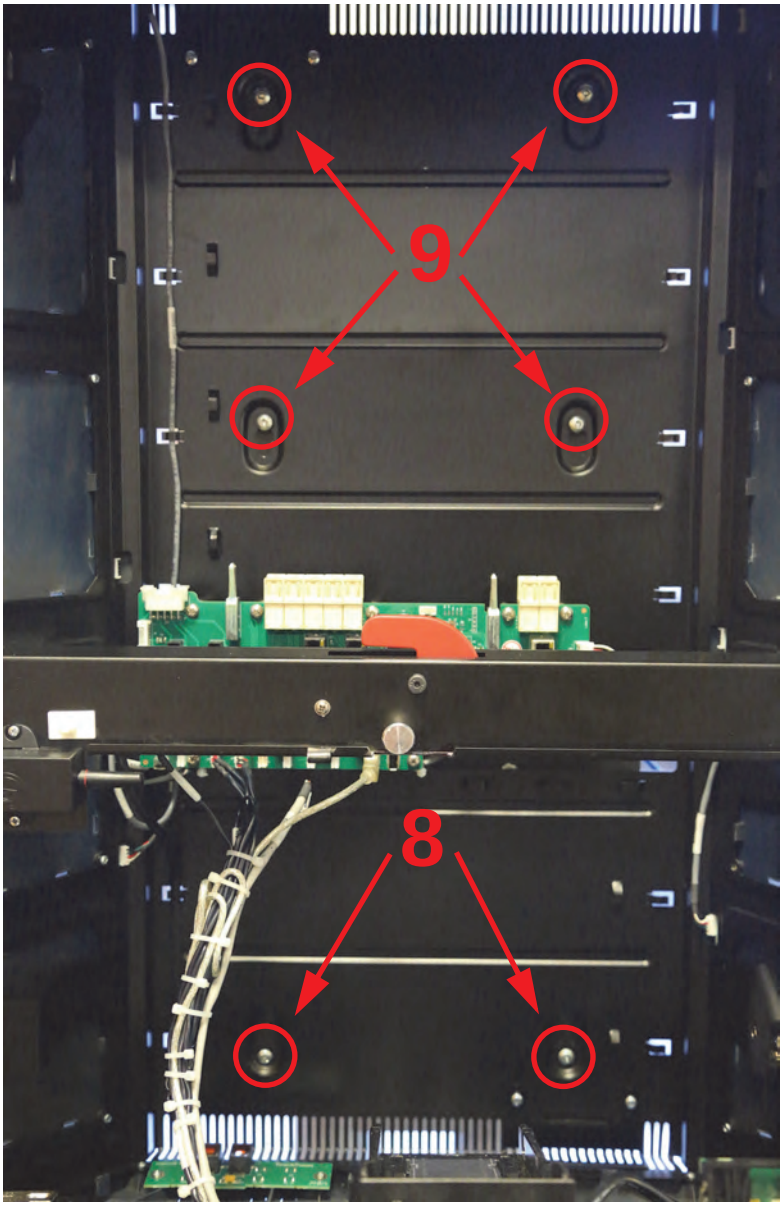


If any wires are routed through the top cable channel, you may need to remove the airflow assembly in order to access the cable channel. See chapter 2, in the section titled “Accessing the Cable Channel” for directions on how to remove the airflow assembly.

Note: The images above do not show the airflow assembly in order to make the top cable channel more visible.

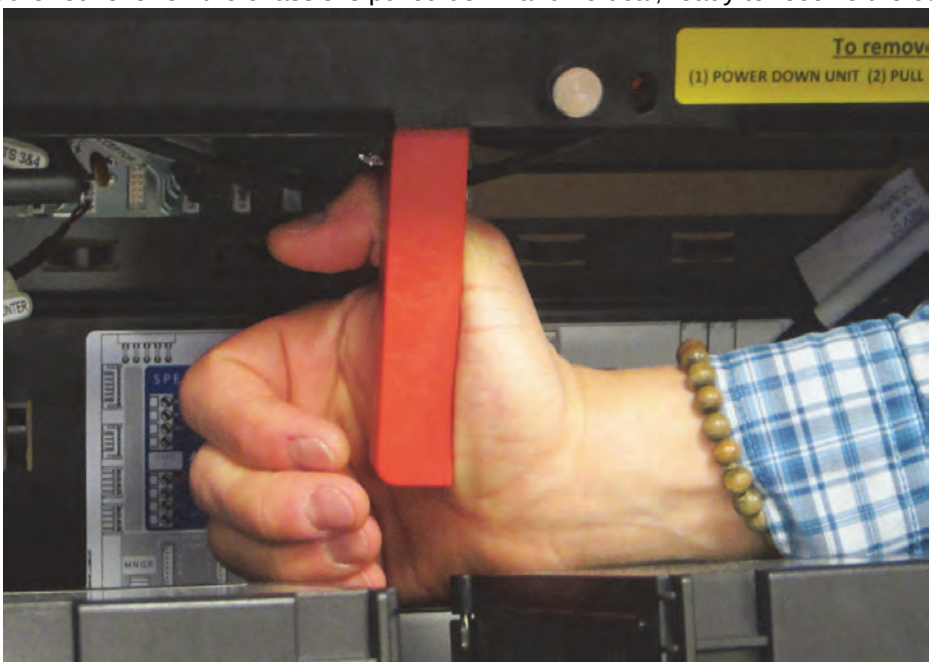
7. Disconnect any cables on the backplane that lead outside Playdium (speakers, network, etc.)

8. Remove the two bottom screws that hold the chassis fastened to the wall (or floor stand.)



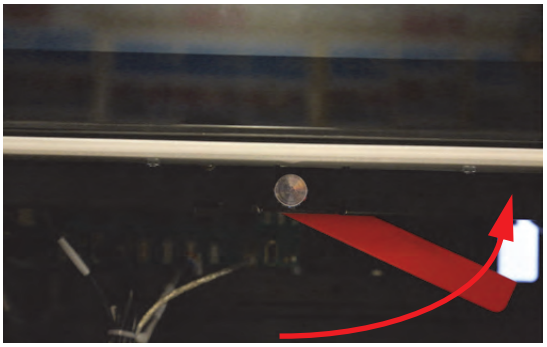
9. Loosen the top four screws.
10. Slide the chassis up, and then pull it off the four screws.
11. Hang the replacement chassis up on the four screws.
12. Fasten the replacement chassis to the wall using the two screws you removed from the original chassis earlier.
13. Tighten the top four screws.
14. Run any cables you removed earlier back through the cable channels.
15. Connect these cables to the appropriate sockets on the backplane.
16. Pull about 1 to 2 inches of slack into Playdium on the cables, then push the wire strain relief brackets into place, then tighten the screws on these brackets to hold the cables in place.
17. Reinstall the bill acceptor(s) you set aside earlier (see the sections on Replacing the Payment Means for more on how to reinstall the bill acceptor(s)).

18. Ensure that the red lever on the chassis is pulled down and vertical, ready to receive the core.



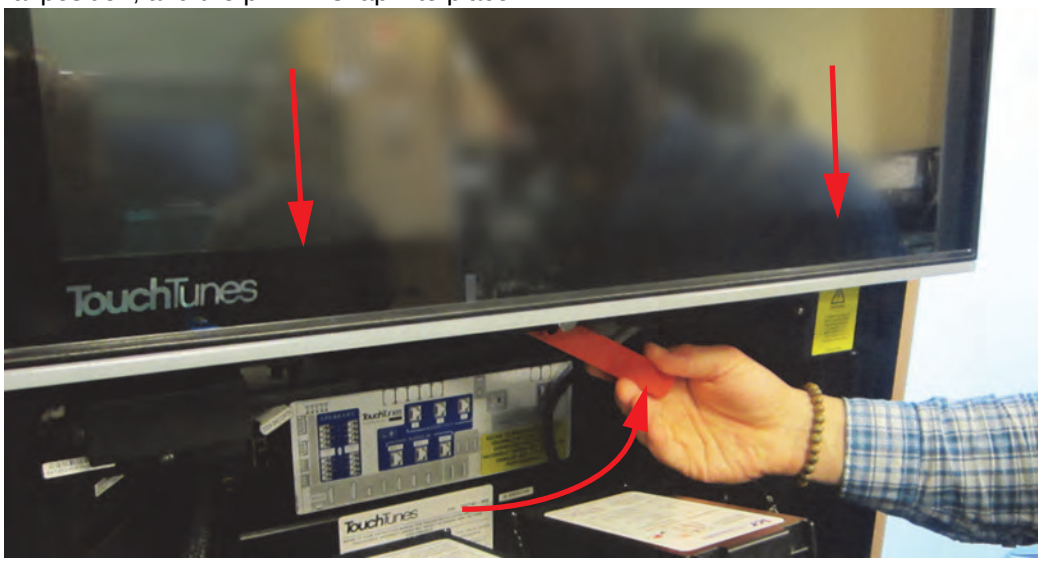
19. Lift the core, and position on the chassis, above the red lever.

20. While holding the core in the chassis, pull the pin that holds the red lever in position, and then carefully move the red lever up.



21. Once you have moved the lever enough, the pin will stay up. Release it, and use that hand to push the core into the chassis, while pushing the red lever up.

22. As you push the red lever up, the core will go down. When the red lever reaches horizontal, the core will be in its final position, and the pin will snap into place.



23. Turn on the jukebox to validate that the new chassis has been installed properly.
24. Close and lock the payment panel, once you have determined that the jukebox is functional.

Troubleshooting 5

This section provides helpful information for troubleshooting Playdium problems.

Sound

Video

Hard Drive and Computer

Payment Means

Touch Screen

Light Show

Sound

Problem 1: No Sound Coming from Speakers

Is Playdium turned on?

If Playdium is in Night Mode, the screen will be off, and the red LED in the brand bar will be lit up.

Cause A: Playdium is in Night Mode

Press the Power Button on the remote (wireless or wired), or the one under the Playdium.

If the screen remains off, see the Video section for more help.

If the screen is on, but not displaying the usual interface, the jukebox may be paused (the word “PAUSED” will be prominently displayed.)

Cause B: Playdium is Paused

Press the Pause button the remote (wireless or wired) to un-pause the jukebox.

If the screen is on, and displaying its usual interface, queue up a song to get it to start playing, if you have not already done so. If the jukebox indicates that music is playing but you still hear nothing, try the following:

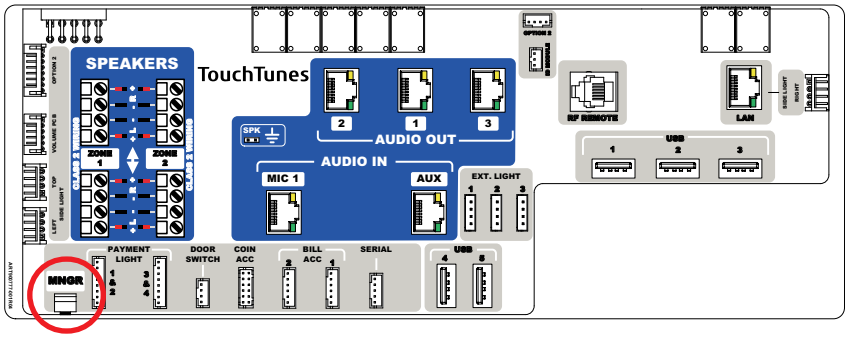
Cause C: Volume is set too low

Using the remote (wireless or wired) or the volume controls under the Playdium, try raising the volume.

The on-screen volume indicator appears and its value increases. If you still hear nothing, try the following:

Cause D: Wiring Issues

Open the payment door, and press the MNGR button on the backplane.



On the screen, press the “Reboot into ODT” button. Once in the ODT, go into the Tests section, then select Audio Tests. Use this audio testing tool to determine if there is an audio signal at the speaker connectors, or whether the issue is caused by the speaker wiring, or the speakers themselves.

While playing a test signal, you can also look at the Zone 1, 2 and 3 Audio Out connectors on the backplane. The tiny LEDs on these connectors will flicker when an audio signal reaches them. If you play a test signal and raise the volume for a zone past 75% and the corresponding connector does not start flickering, then it means the signal is cut off before this point: in that case, you need to replace the core.

If playing a test signal with the volume at a high enough level indicates there is a signal at the speaker connectors, but you still hear nothing coming from the speakers, then you need to check your speaker wiring, or the speakers themselves.

If the audio testing tool does not show any signal at the speaker connectors, even while the volume is at maximum for the relevant zone, then there may be a problem with the core or the backplane.

Cause E: Core is Damaged

Try a different core on the installed chassis, and see if that fixes the problem

If a new (and verified as working) core does not fix the problem, the backplane needs to be replaced.

Problem 2: Distorted or Glitchy Sound

If the sound is distorted, or you hear glitches, artefacts, pops, hiss or hum along with the music, there are a few things you can try:

Cause A: EQ Settings Too Extreme

Set the EQ settings for that zone to “flat” (no boost to either treble or bass) and turn off the “Bass Boost” setting on the Operator Screen.

If the distortion is reduced or eliminated, or if you hear fewer pops, you can try gradually adjusting the EQ settings to obtain an optimal sound that is not distorted. If you cannot obtain a satisfactory sound without hearing

distortion, check the speaker wiring for weak connections, or you may want to use different speakers that are designed to provide the sound you desire.

If the distortion remains:

Cause B: Volume Too High

Lower the volume for the affected zone until the distortion disappears.

If the distortion is eliminated, you should again consider replacing the speakers with something that can take the higher volumes you are trying to obtain.

Cause C: Damaged or Unsuitable Speakers

Using speakers that are in verified good shape, and powerful enough to take a powerful signal, play music again and see if the distortion goes away.

If the good speakers sound OK, then the previous speakers were either damaged, or unsuitable for the levels required for the location.

If the distortion remains:

Cause D: Software

Open the payment door, and press the MNGR button on the backplane. On the screen, press the “Reboot into ODT” button. Once in the ODT, go into the Tests section, then select Audio Tests. Use this audio testing tool to determine if the distortion or glitches still happen.

If there is no distortion while using the audio testing tool, then the problem might be software-related.

While in the ODT, press the “Restore Software” button, and proceed with a software reinstall. If software corruption was causing the audio issues, this may fix the problem.

If the distortion remains while running audio tests, and trying other speakers does not eliminate the issue:

Cause E: Core is Damaged

Install a different core onto the chassis, and see if there is a difference in sound. If the replacement core does not present any distortion, then the original core is damaged and needs to be serviced by TouchTunes.

If the replacement core also produces distortion, then the backplane might be at fault.

Cause F: Backplane is Damaged

Replace the backplane in the chassis, and try the audio test tool in the ODT again afterwards.

If none of the above addresses the audio problem, try some of the suggestions in the other Problem entries in this Sound section.

Problem 3: Sound Skipping

The music skips ahead in the middle of a song, or songs get cut off instead of playing all the way through.

Cause A: Song Length Limit is ON

On the Operator Screen, under Music | Options, make sure the Song Length Limit feature is set to OFF, or that the Maximum Length value is set high enough to avoid cutting off the songs you did not wish to cut off.

Cause B: Song File Corruption

Replace the hard drive, and try playing the same songs that were skipping with the first hard drive. The songs were probably corrupted on the hard drive, or there could be corruption in the jukebox software, or the hard drive might be physically failing.

If the replacement hard drive does not lead to skipping, you have solved the problem. The hard drive you removed from the jukebox might still be salvageable, though.

Cause C: Software Corruption

Install the problematic hard drive in a jukebox, and boot into the ODT by holding down the MNGR button while booting. Try to perform a software restore. If the ODT reports that the restore was successful, reboot into OpenStage 2, and see if the skipping issues are still present.

Problem 4: Low Volume

Even after raising the volume on the relevant zone(s), the music still isnt loud enough.

Cause A: Input Volume Set Too Low

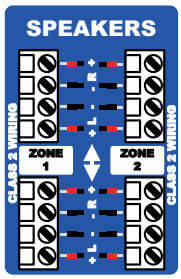
In the Operator Screen, review the Zone X IN controls (X being the zone that is not loud enough) and ensure the “Juke” volume is set to its maximum value.

Cause B: Amp Settings Incorrectly Set

In the Amp Settings section, ensure that you have set the correct settings:

- If using the internal amp to power your speakers, check that the Zone X Amplification is set to “Internal”.
- If using the Zone output on the backplane to send the audio to an external amplifier, check that the Zone X Amplification is set to “External”.

Cause C: Polarity Inconsistencies in Speaker Wiring



Check your speaker wiring, and make sure you have been consistent with regards to polarity. Inverting the ‘+ (red) and ‘-’ (black) conductors on your speaker wiring for one speaker or one channel, will cause some phase cancellations, leading to one speaker “canceling” the other speaker out, at least partially.

Cause D: Unsuitable Impedance Load on Internal Amplifier

If using the internal amplifier, check the impedance of the speakers connected to the speaker outputs. These outputs are optimized for a load of 4 ohms, and the internal amplifier can comfortably deal with a load that goes from 3 to 8 ohms. Lower impedance usually means louder audio, and higher impedance usually means softer audio.

If you are connecting multiple speakers per channel, you may have to calculate the effective impedance produced by all the speakers on a channel. For example, connecting two 8 ohm speakers in series on one channel will lead to an effective impedance of 16 ohms, leading lower volumes. By connecting those two speakers in parallel (which is made easy by the doubled speaker connectors on the backplane, which are wired in parallel) you would instead get an impedance of 4 ohms, which is optimal for the internal amplifier.

Review the speaker wiring examples in the Connection Diagrams section of this manual for help in figuring out optimal wiring patterns for multiple speakers per channel.

If none of the above seems to increase the output volume, there may be a problem with the jukebox core.

Cause E: Core is Damaged

Replace the core with a known working core (remember to move the hard disk from the old core to the replacement) and see if the volume increases. If this works, the core you replaced may need servicing from TouchTunes.

Problem 5: Songs Fluctuate in Volume

If you hear abnormal volume fluctuations in the middle of a song:

Cause A: AVC is ON

Check that the AVC feature in the Operator Screen (under Sound | Global) is set to OFF, or is inactive. This feature automatically adjusts the output volume in real-time while a song is playing in order to keep a constant volume, but it can make it seem like a song's volume is fluctuating.

Turning on Sound Stabilization will only adjust the volume between songs, to keep all songs playing at a generally similar level, but it will not adjust the volume mid-song. Turning on Sound Stabilization disables the AVC option.

If AVC was not the cause of the volume fluctuations:

Cause B: Speakers or Speaker Wiring

Check the speakers and speaker wiring to ensure that they are not damaged. Try different speakers to see if the speakers themselves are at fault.

If none of the above reduces or eliminates the volume fluctutations:

Cause C: Core is Damaged

Install a different, verified working core (remember to transfer the hard drive to the replacement core) to see if the core is the cause. If replacing the core fixes the problem, the original core may need servicing from TouchTunes.

If replacing the core does not eliminate the fluctuations:

Cause D: Backplane is Damaged

Replace the backplane, then see if the fluctuations still happen.

Problem 6: Microphone Does Not Work

You are using a Mic-IN box to connect a house microphone, but whenever you try to use the microphone, the sound going into the microphone is not broadcast over the speakers.

Cause A: Microphone not ON / Talk Button Must Be Pressed

The microphone might have an on/off switch, or a "talk" button. Ensure that the microphone is set to on, or that the talk button is being pressed during testing.

Cause B: MIC Volume Set Too Low

In the Operator Screen (accessed by pressing the MNGR button on the backplane inside Playdium) navigate to Sound|Zone X In (where X is the number of the zone where you wish to output the sound from the microphone.) Ensure that the Microphone volume is set high enough (raise the volume, as well as the MAX setting, if necessary) and check that the Mute setting is not activated.

Cause C: Wiring Issues

If none of the above works, check the microphone wiring, as well as the connection to the Mic-IN box, and the connection between the Mic-IN box and the backplane.

Cause D: Mic-IN box is Damaged

Replace the Mic-IN box.

If the problem persists, it may be necessary to replace the backplane, or the core.

Video

Problem 1: No Video (Display is All Black)

You do not see anything on the screen.

Is the red LED in the left part of the brand bar (just below the TouchTunes logo) lit?

The Red LED is Lit

This means the jukebox is getting power.

Cause A: Night Mode

Press the power button on the wireless or wired remote, or under Playdium.

If this does not bring the jukebox back out of Night Mode, skip to “Using the ODT” below.

The Red LED is Not Lit

This can mean one of two things:

Cause B: Jukebox Has No Power

Check that Playdium is plugged into a wall socket that provides sufficient power, then open the payment door and check that the power switch is set to ON.

If the jukebox has power, is actually running normally, apart from the screen being black, and is possibly even playing music, proceed with the following steps.

Using the ODT

Cause C: Core is Damaged

Power the jukebox off by flipping the power switch, then power it back on again, then hold the MNGR button to boot into the ODT.

If the screen remains black throughout the reboot and in the ODT, replace the core.

If the screen functions normally while rebooting and in the ODT:

Cause D: Non-destructive Software Crash

Exit the ODT and let Playdium reboot normally.

If the screen does not turn black again, you have resolved the issue. If this happens again, you can reboot the jukebox to bring it back to working order (this can even be done from the Dashboard.) If it happens frequently, you may want to try the next suggestion.

If, after the reboot, the screen comes back black:

Cause E: Corrupted Software

Reboot into the ODT, and perform a Software Restore.

If the software restore does not resolve the issue, you may have to replace the core.

Problem 2: Video Corruption

There are glaring graphical glitches on-screen, including wrong colors or whole sections of the screen not displaying. The screen flashing intermittently can also be dealt with using these steps:

Reboot into the ODT.

Does the video corruption still happen while the ODT is running?

If no, then the problem is likely caused by software corruption, and you should proceed with the checks suggested below.

If yes, you should replace the core.

Launch the Diagnostics tool in the ODT.

Cause F: Software Corruption or Hard Drive Failure

If any tests indicate a hardware failure, replace the affected component (replace the core if any component within the core has failed.) In particular, if there is any indication that the hard drive's hardware is failing, replace the hard drive, as a failing hard drive can lead to corrupted files, which can lead to video corruption.

If there is no hardware failure detected that can indicate the cause of the video corruption:

Perform a software restore.

Once the restore is successful, reboot and see if video corruption still happens.

Cause G: Core is Damaged

If the video corruption remains after the software restore, you should replace the core.

Problem 3: Display Too Bright or Too Dim

The brightness of the backlighting in the display can be adjusted by accessing the Operator Screen.

Cause A: Display Backlight Brightness Improperly Set

Open the payment door, and press the MNGR button on the backplane. Navigate to Hardware | Options, and adjust the backlighting until the display is just bright enough for your needs.

If the brightness does not change when you try to adjust it,

Cause B: Software Corruption

Reboot into the ODT, and perform a software reinstall.

If the reinstall fails, replace the hard drive.

If the reinstall succeeds, but you still cannot get the proper display brightness, you may need to replace the core.

Hard Drive and Computer

Problem 1: OpenStage 2 Will Not Boot

The jukebox never reaches a usable state, and instead displays an error message, or is stuck on a particular loading screen.

If the error message does not already indicate the cause of the problem (such as a missing or damaged ID Chip) the usual cause tends to be the hard drive.

Cause A: Software Corruption

Open the payment door, and flip the power switch off. Flip the power back on, then press and hold the MNGR button on the backplane, until the ODT starts. Use the Diagnostics tool, and see if any problems are detected, or if any filesystem corruption was fixed. Press Exit and let the jukebox reboot.

If OpenStage 2 still refuses to boot,

Cause B: Software Corruption (that cannot be fixed with a file system check)

Reboot back into the ODT, and perform a Software Restore.

If the restore fails, replace the hard drive.

If the restore succeeds, reboot and see if it fixes the problem.

Cause C: Failing Hard Drive

If OpenStage 2 still refuses to boot, replace the hard drive.

Problem 2: Jukebox is Sluggish or Less Responsive

The jukebox is slow to respond to touchscreen interactions, or the animations are choppy instead of smooth.

Cause A: Missing RAM

Reboot into the ODT. Check the Total RAM shown in the top-right Hardware Info box. On a “launch” Playdium, this number should read 3.75GB. If the number is lower (such as 1.75GB) this is a sign that one of the RAM modules has failed. In this case, replace the core.

If the amount of RAM appears to be correct,

Cause B: Software Corruption

Use the Diagnostics tool to find possible issues, then consider performing a Software Reinstall if the Diagnostics tool does not find and fix anything.

Payment Means

Problem 1: Bill Acceptor Rejecting Newer Bills

New (different) bills have appeared in circulation, and bill acceptors are rejecting it.

Cause A: Firmware Out of Date

Check if a new firmware is available for this bill acceptor, and update if one is available. See http://productwarranty.touchtunes.com/display/TD/900729-001+ICT+Bill+Acceptor+Firmware+Upgrade+Guide for more on how to update the firmware on your ICT bill acceptors.

Problem 2: Bill Acceptor Rejecting Too Many Bills

The ratio of rejected bills is unreasonably high.

Cause A: Firmware Out of Date

Check if a new firmware is available for this bill acceptor, and update if one is available. See http://productwarranty.touchtunes.com/display/TD/900729-001+ICT+Bill+Acceptor+Firmware+Upgrade+Guide for more on how to update the firmware on your ICT bill acceptors.

Cause B: Bill Acceptor is Damaged

Replace the bill acceptor.

Problem 3: Bill Acceptor Not Accepting Bills at All

The bill acceptor does not react to bills being inserted.

Cause A: Bill Stacker is Full

Empty the bill stacker. A bill acceptor can stop accepting bills if its stacker is full.

Cause B: Bad Connection

Check the cable that connects to the bill acceptor, and ensure it is seated properly and undamaged.

At this point, it can be useful to remove the four (4) screws that hold the bill acceptor in position on the payment door, and pull the bill acceptor out, *while it is still connected.* (see the section on Replacing a Bill Acceptor in the Service and Maintenance chapter for more on how to remove the bill acceptor from its bay.) This will let you see the Diagnostics LEDs in the front of the bill acceptor. Based on the status of the green LED, here is what you can determine:

Green LED Status	Explanation
ON (steady)	Bill acceptor OK.
OFF	Power Off
1 Flash	Bill jammed
2 Flashes	Disabled from system
3 Flashes	Sensor problem
4 Flashes	--
5 Flashes	Bill stacker is removed
6 Flashes	Bill stacker is full
7 Flashes	Motor problem

Cause C: Bill Acceptor Jammed

Check that the bill acceptor is not jammed (unjam the bill acceptor if necessary.)

You can also test the bill acceptor by going to the Operator Screen, then navigating to Money | Options, then pressing the TEST button under “Coin & Bill Acceptor”. If you do not see any money added on this screen when inserting a bill, then the bill acceptor may need to be replaced.

The backlighting around a bill acceptor is turned off by the software if the bill acceptor is not detected, or if it reports being jammed or otherwise non-functional.

If none of the above results in a working bill acceptor, or if the bill acceptor is visibly damaged:

Cause D: Bill Acceptor is Damaged

Replace the bill acceptor.

Touch Screen

Problem 1: Dead Spots, Not Responding to Touch, Bad Calibration of the Touch Screen, or Touch Screen Selecting on its Own

Either some parts of the touch screen do not respond to being touched, or the whole screen does not respond to touch, or else touching in one spot registers as a touch elsewhere on the screen.

Cause A: Sticker, Tape or Other Objects Stuck to Touch Screen

Check that there are no stickers, tape or anything else stuck to the touchscreen glass, even outside the actual display area. Any objects stuck to the glass will prevent it from registering touch properly.

Cause B: Dirty Screen

Clean the screen. Dirt and other residue on the screen will prevent the touch screen glass from registering touch properly.

Cause C: Touch Screen Needs to be Recalibrated

Recalibrate the touch screen. This is done by holding down the manager button for a few seconds, until the calibration screen appears. Follow the on-screen prompts to complete calibration.

Cause D: Bad Connection Between Core and Backplane

Power down, then open the payment door, and un-dock the core. Re-seat the core carefully.

If none of the above works, the problem could be caused by either software corruption, or hardware damage. To check for software corruption:

Cause E: Software Corruption

Reboot into the ODT.

At launch, the ODT requires that you calibrate the touch screen. Do touch screen problems still happen while the ODT is running?

If yes, you should replace the core.

If no, launch the Diagnostics tool.

If any tests indicate a hardware failure, replace the affected component (replace the core if any component within the core has failed.) In particular, if there is any indication that the hard drive's hardware is failing, replace the hard drive, as a failing hard drive can lead to corrupted files, which can lead to touch screen problems.

If there is no hardware failure detected that can indicate the cause of the video corruption,perform a software restore. Once the restore is successful, reboot and see if the touch screen now works properly (you may have to recalibrate again.) If you cannot calibrate properly, you should replace the core.

Light Show

Problem 1: Light Show Not Working

The colored lights all around Playdium are not lit, even though the jukebox is otherwise fully-functional.

Cause A: Light Show is Turned Off

Open the payment door, and press the MNGR button to go into the Operator Screen. Navigate to Hardware | Lightshow. Turn on the Light Show, if it is not already turned on.

Cause B: Damaged or Disconnected Light Show Cabling

If this does not cause the light show to light up, open the payment door, then un-dock the core and set it aside. Check that all the cables going from the backplane to each LED strip in the Light Show is connected properly, and undamaged.

If all the Light Show cabling appears to be connected properly, test the light show using the ODT, in order to determine if the problem is with the software, or the hardware.

Cause C: Software Corruption

Dock the core back into the chassis, and turn on the jukebox. When the TouchTunes splash screen appears, press and hold down the MNGR button until the ODT starts. Once in the ODT, go to Tools, then Lights Test. Toggle the switch for the light show, and try each color in turn.

If the light show lights up here, perform a Software Restore.

Cause D: Failing Hard Drive

If the software restore fails, replace the hard drive.

Cause E: Damaged Backplane or Chassis

If the light show remains dark while being tested in the ODT, you may need to replace the backplane or the entire chassis.

Problem 2: Light Show Malfunctions

The light show displays abnormal flashing, wrong colors, or has dead LEDs.

Follow the process described under Problem 1: Light Show Not Working. In particular, the Lights Testing in the ODT can help determine if the LED strips are damaged (if only part of an LED strip remains dark, or does not show the correct color, for instance.) If all the lights light up correctly during this test, the problem is more likely due to software.

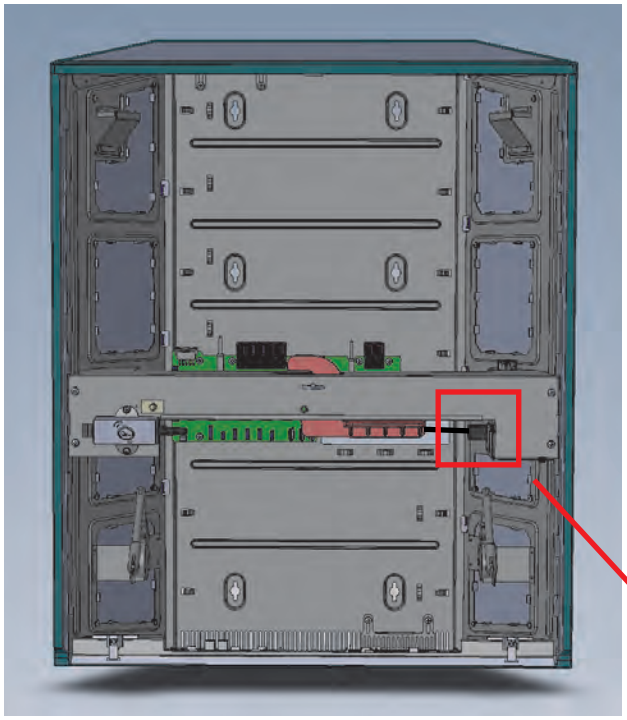
Note: The blue brand bar that appears just below the touch screen includes a single red LED near its left extremity. This red light is not part of the jukebox's light show, and when lit, it should not be considered as a malfunction of the light show.
This red LED is usually turned off when the jukebox is functioning normally, but it turns on if the jukebox loses network connectivity. It is also on while the jukebox is booting, or when the jukebox is in Night Mode.

Cause A: Core is Damaged

If you have eliminated the LED strips, the hard drive, and the chassis as possible causes for the malfunction, then it is possible that the core could be the cause.

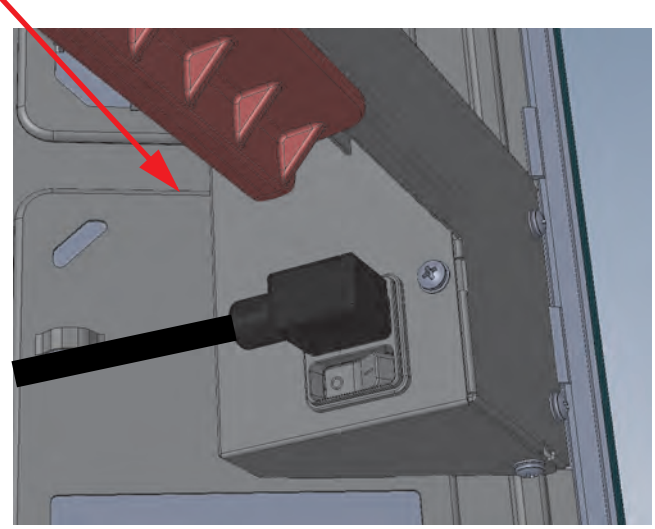
6 Connection Diagrams

The following pages show how the different operator-serviceable components of Playdium should be connected, and how external devices should be connected to Playdium.

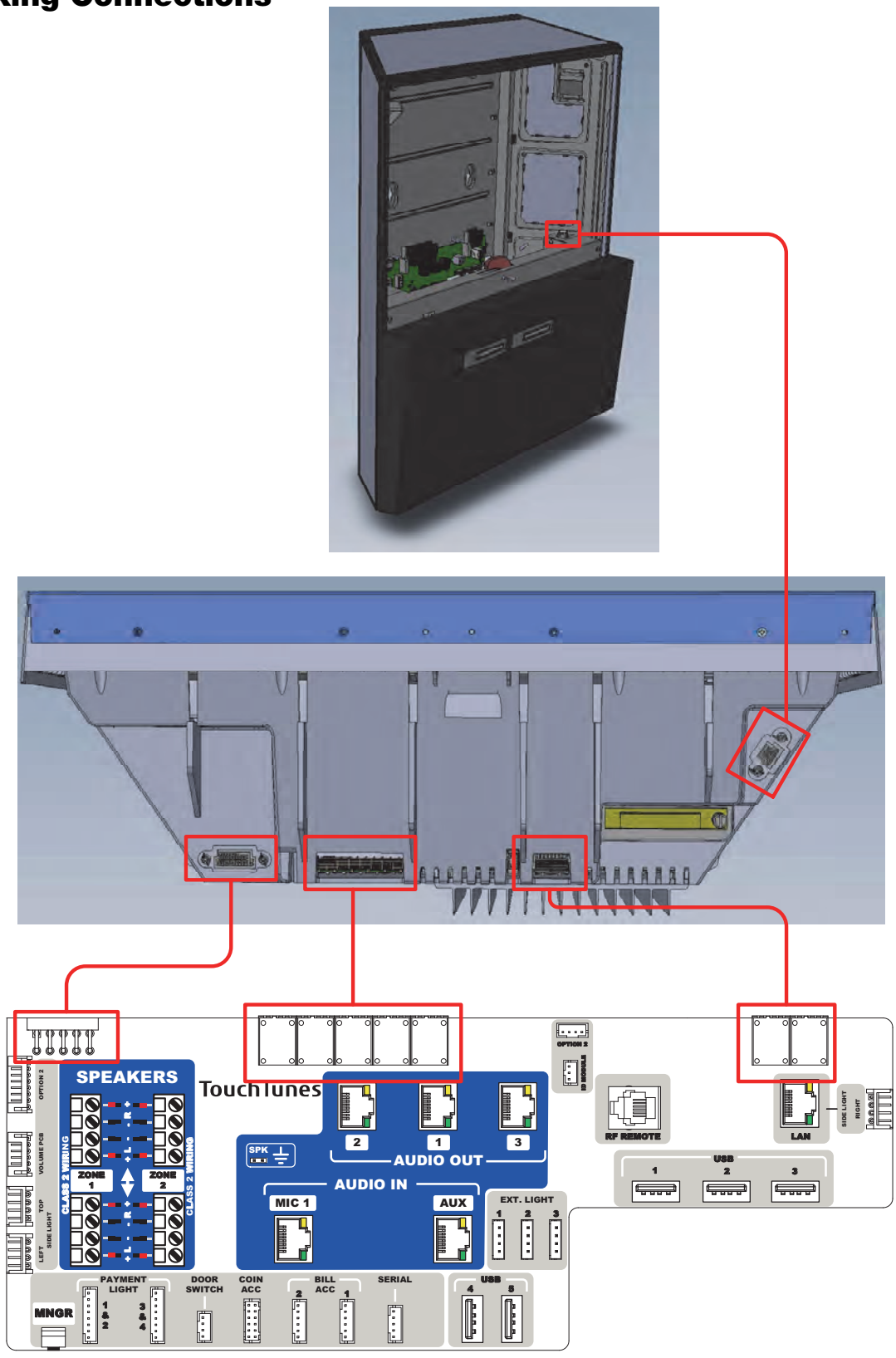


Playdium's power supply is located on the right side of the chassis, right below where the core would go. The power cable goes from the power supply, and exits through the back, to be connected to a wall socket.

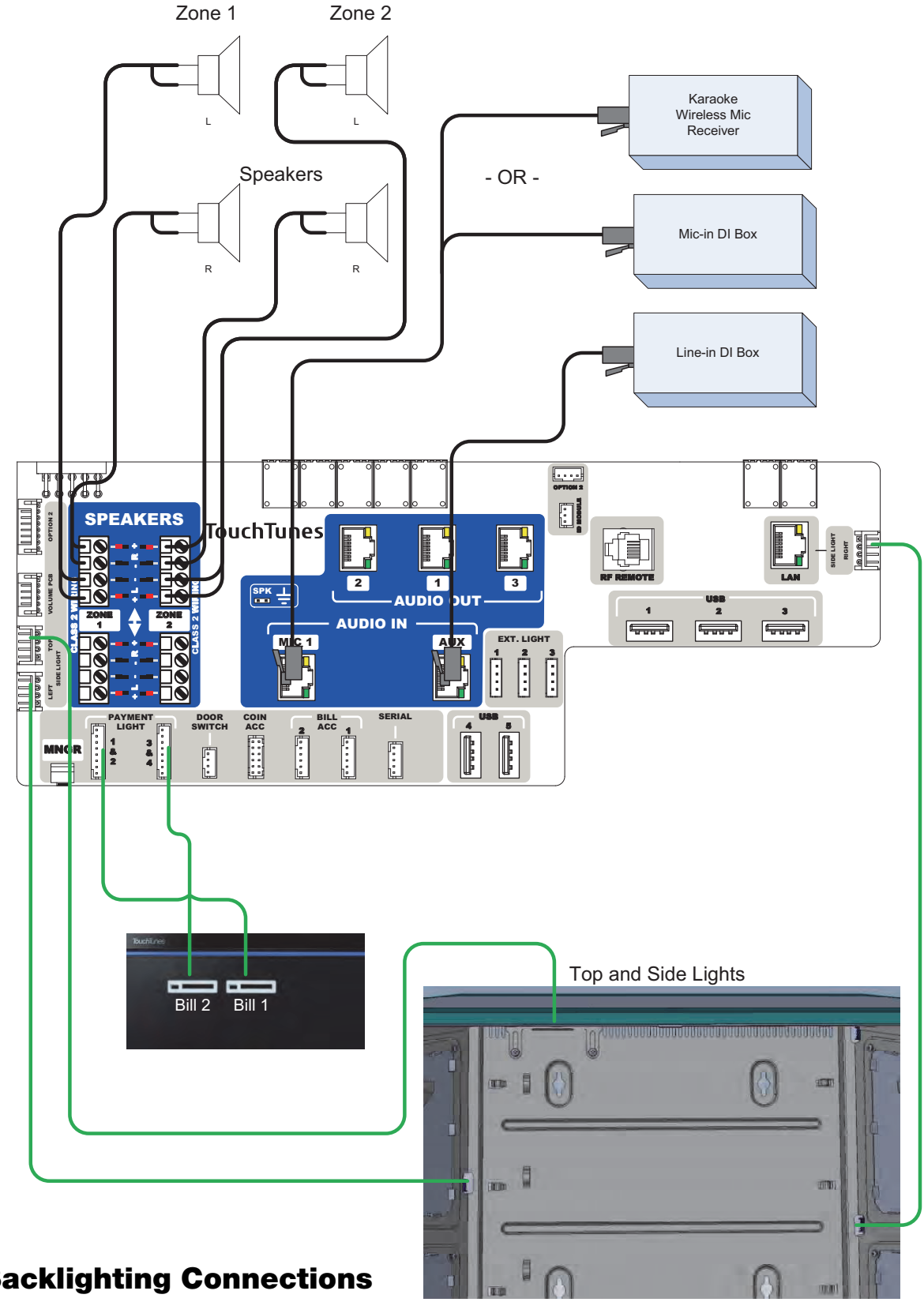
The power supply provides the power for all the components in the core, payment panel, and all the backlighting that is part of the chassis.



Docking Connections

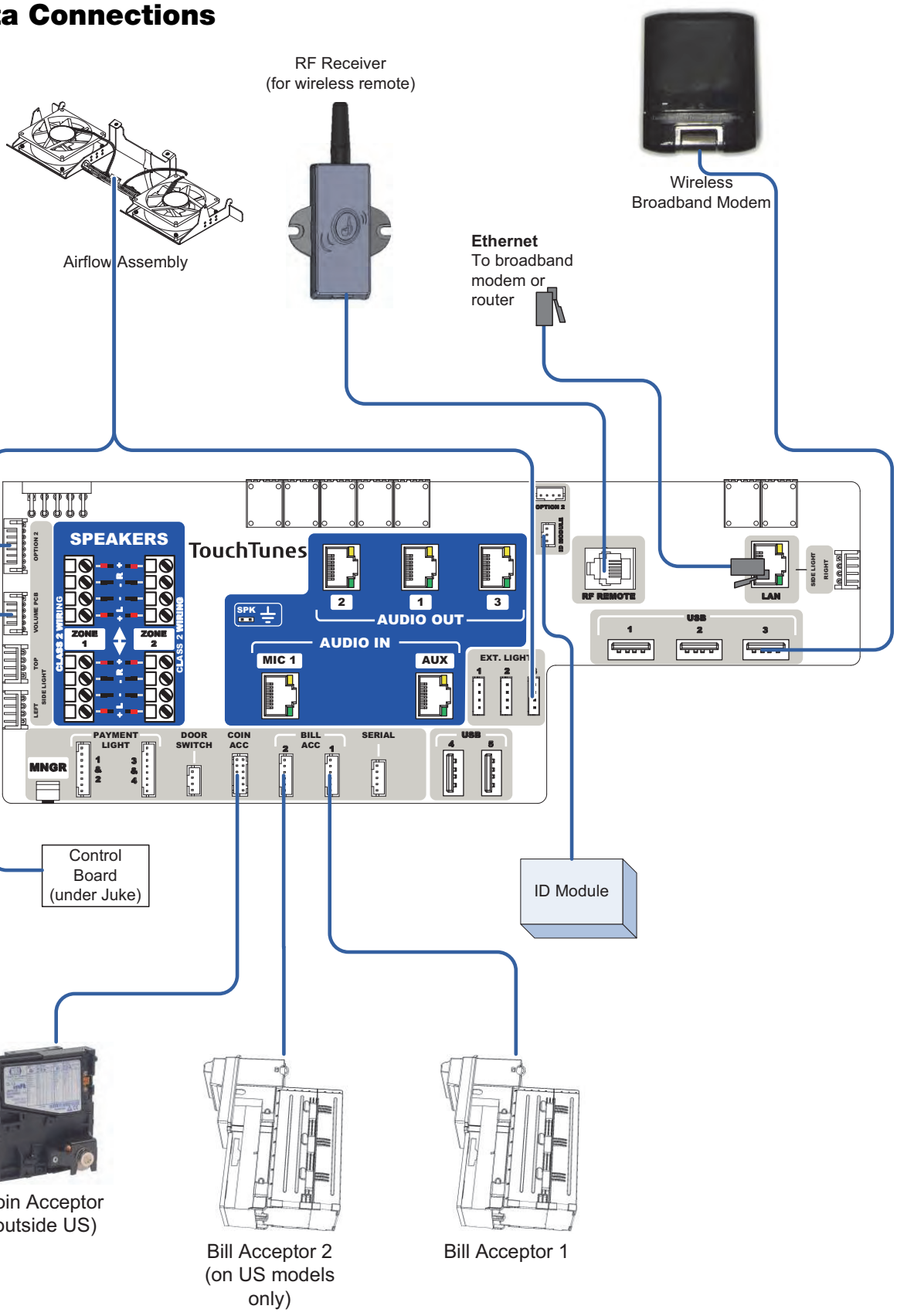


Audio Connections

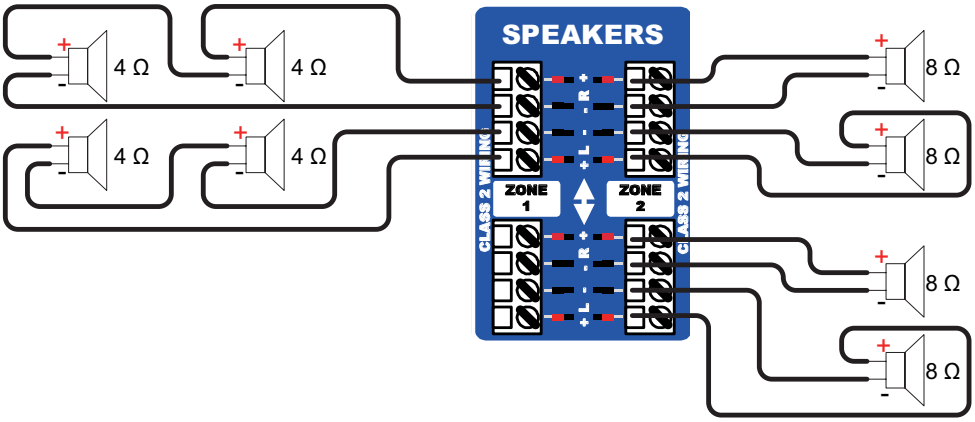


Backlighting Connections

Data Connections

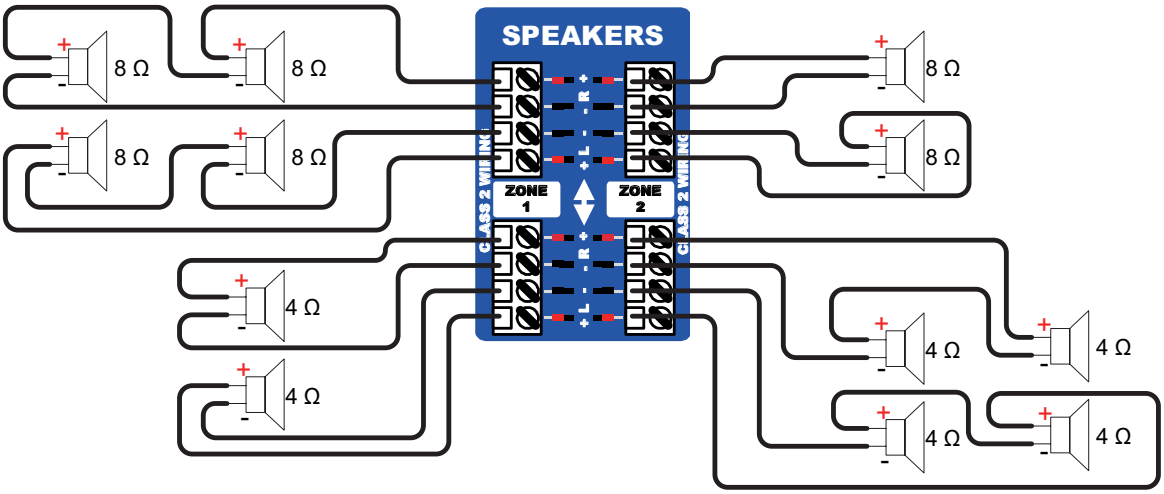


Speaker Wiring Examples



Zone 1:
2 x 4 Ω per channel
wired in series,
= 8 Ω per channel

Zone 2:
2 x 8 Ω per channel
wired in parallel,
= 4 Ω per channel



Zone 1:
2 x 8 Ω in series (16 Ω total)
wired in parallel with 1 x 4 Ω
= 3.2 Ω per channel

Zone 2:
2 x 4 Ω in series (8 Ω total)
wired in parallel with 1 x 8 Ω
= 4 Ω per channel

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